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AND

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Articles.

ASPECTS OF CIRCULATORY FAILURE.

By SURGEON CAPTAIN W. D. W. BROOKS, R.N.V.R.

DURING the last thirty years experimental and clinical studies of the circulatory system have been extensive, and more than a little successful in elucidating some of the many problems which confronted both the clinician and the physiologist. The accumulated facts, however, are of less aid in understanding the clinical picture of cardiac and circulatory diseases than one might well expect. Electrocardiography—perhaps the most outstanding advance—has revealed in some detail the mechanism of various disturbances in the conduction of nerve impulses, and in the excitability of the myocardium. Further, the correlation between the clinical picture and the electrocardiographic findings has made the diagnosis of cardiac pathology much more accurate than before; but on the other hand, has disclosed relatively little concerning the efficiency of the heart, and still less as to the state of the circulation as a whole. Thus, for example, a patient may live twenty years and at the end still be capable of hard physical work with an established auricular fibrillation, while another whose electrocardiographic and clinical picture was previously identical may in the course of a few months be dying with congestive failure of the circulation. An even more dramatic example of our ignorance came the other day, when a patient we had occasion to observe maintained a fairly efficient circulation with ventricular tachycardia for almost exactly a month, and then reverted to normal sinus rhythm, and is now apparently none the worse. Examples, presenting problems such as these, constantly recur with the most salutary results in checking that tendency to dogmatism which is every clinician's lot.

Perhaps a majority of the symptoms and signs of the patient with cardiovascular disease depends rather on the state of the peripheral circulation than on the heart. Particularly when circulatory failure occurs in the meagreness of our knowledge of the underlying conditions governing the clinical picture fully exposed. However, we know just enough to realize that the factors which determine this picture are both numerous and variable.

and that they may be present in many different combinations. Moreover, compensatory factors frequently counteract and thus obscure unfavourable changes. Finally, not only are these various changes and adjustments present in different types of cardiovascular disease; but in different stages of the same type of heart disease new factors, or different combinations of factors, may be responsible for the same clinical manifestation. The matter, therefore, is not only complex and difficult on that account, but even in the most carefully studied aspects of the circulation, difficulty in the construction of an accurate and detailed picture of the sequence of events in the progress of circulatory failure is made worse because numerous gaps exist in our knowledge, often at the most crucial points of the problem.

An attempt to correlate the clinical picture with the functional and structural changes of circulatory failure can be at its best only incomplete. None the less it is desirable from time to time to assemble the scattered fragments of our jigsaw puzzle, fit them together as best we may, and then inspect them from a distance in the hope that they may have assumed the outlines of a comprehensive picture which, despite its incompleteness, may help in the estimation of the clinical condition of the patient and in the proper application of therapeutic measures. Should your criticism of the picture we are about to present to you be that it is too modern in the sense in which most of to-day's paintings offend, we can only retort that at least it will have its own and possibly individual meaning to each of you, different though those concepts may be, and that therein lies one of the essentials which make Medicine an Art as well as a Science.

A.—Heart Disease, Shock and Circulatory Failure.

Whenever the circulation of the blood fails to accomplish its basic task of efficiently supplying the tissues with nourishment, and promptly eliminating the waste products of cell metabolism during the normal activities of life, circulatory failure may be said to exist. Like most other physiological functions, circulatory adequacy has wide limits of alteration in healthy individuals, and indeed heart disease may coexist with a circulation normal in every respect for years. Often, however, long before actual impairment of the efficiency of the body occurs, marked alterations and compensations take place of necessity in various parts and systems of the organism. Thus, for example, a patient may perform normal amounts of daily work, but accomplish this with a higher expenditure of cardiac energy, and an increased utilization of oxygen and exchange of other substances between the capillary blood and the tissue cells. Given these adjustments, the patient may live apparently normally with his disability.

In the presence of heart disease circulatory readjustments occur largely dependent qualitatively and quantitatively on the localization and type of cardiac lesion. It is well to emphasize, however, that circulatory failure often occurs independently of heart disease, and therefore it is erroneous to speak of heart disease and circulatory failure interchangeably. For example, circulatory failure often arises from vasomotor lesions. Such is the case in vasomotor collapse (shock) which so frequently follows trauma, surgical operations, certain diseases of the nervous system, infections and toxæmias. The clinical picture is quite distinct from that of heart failure. The patient is pale;

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Case Report

[illegible]

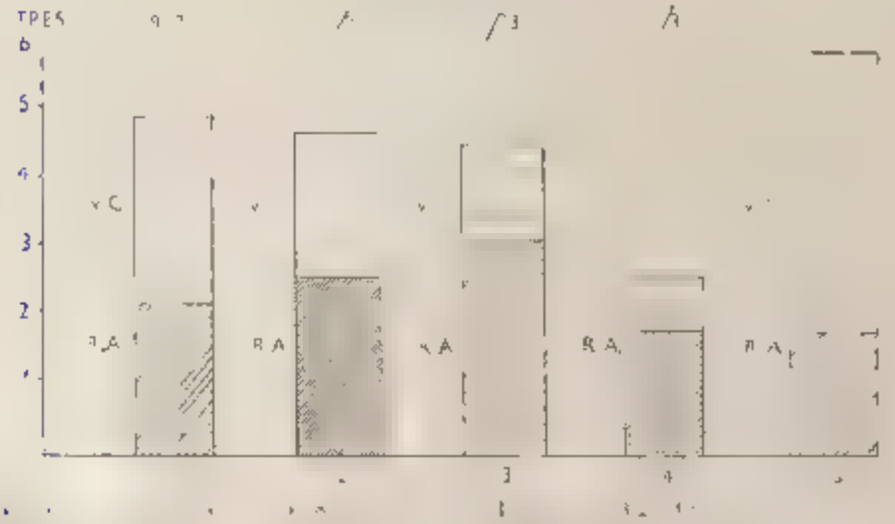
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]


TPES
6
5
4
3
2
1
RA
RA
RA
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RA

[illegible] as high as [illegible] per cent of oxygen [illegible] may be [illegible] interrelation of [illegible] of these factors.

With gross [illegible] congestion, particularly [illegible] the lungs [illegible] reflexes [illegible] are examples [illegible]

It has been shown [illegible] progress [illegible]

When these progressive changes [illegible]

The pressure [illegible]

[illegible] at this stage [illegible] stagnation of [illegible] of the blood in the hypostatic portion [illegible] pulmonary oedema. [illegible] susceptible [illegible]

It [illegible] this postural gravitation [illegible] represent different [illegible] knowledge of [illegible]

[illegible] pressures [illegible] pressure [illegible] arterial pressure [illegible] oxygen [illegible]

[illegible] Congestion [illegible] for example [illegible] sensitive [illegible] blood. This is that stage [illegible] the heart has become a grave [illegible] to death.

D[illegible] Certain Special Types of Circulatory Failure

[illegible]

[illegible]

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[illegible] the Blood [illegible]
5, 34
4 [illegible] Medical [illegible] 7 [illegible] 29.
[illegible]
20
[illegible] 38 445 [illegible]
[illegible] 3, 4
[illegible] Arterial [illegible] 24. 1
[illegible] Aspects of the [illegible] 7 1
[illegible]

THE H.M. DOCKYARD MEDICAL OFFICER

By Surgeon Commander S. HENKANSON, R.N.

[illegible]

[illegible] Medical Officer [illegible] Dockyard [illegible] Yard [illegible]

[illegible] Medical Officer [illegible] Royal [illegible] Naval [illegible] Medical Officer [illegible] Yard [illegible]

[illegible]

[illegible]

[illegible]

RESIDENCE.

[illegible]

DUTIES.

[illegible]

CONDITIONS [illegible] HEALTH [illegible] SERVICES.

[illegible]

[illegible]

[illegible] illness involves the future as well as the present, and the Surgeon is reminded that one of the main objects of medical examination is to secure [illegible] continuous effective service.

[illegible]

[illegible] temporary [illegible] Hired [illegible] Form D.[illegible] [illegible] fitness is [illegible] more [illegible] more years [illegible] service. [illegible] Hired [illegible] the Medical Officer has [illegible] and [illegible].

[illegible]

[illegible] Form D.[illegible] [illegible] Surgery Record. The Medical Officer [illegible] D.[illegible] [illegible] physical [illegible] [illegible]

[illegible]

[illegible] Agreement [illegible] Form D.[illegible]

[illegible] COMPENSATION

[illegible] duty [illegible] Dockyard Medical Officer. [illegible] six months [illegible] Form D.[illegible] [illegible] Admiralty. [illegible] Form D.[illegible] [illegible] Lords Commissioners [illegible] six months [illegible]

[illegible] WORKMEN [illegible]

DOCKYARDS, [illegible]

[illegible] Medical Officer [illegible]

[illegible] Medical Officer [illegible]

approval of the Admiral Superintendent. When further extension is sought a report is submitted to Admiral Superintendent for the Admiralty when the Medical Officer recommends an extension of sick leave and states the probable duration of absence.

When there is a reasonable prospect of return to duty the Lords Commissioners may grant an extension of sick leave at intervals of three or six months but if return to duty seems hopeless retirement is invalided at an early date.

When a patient is sent to a Naval Hospital or Sanatorium a report on his progress may be obtained from the Medical Superintendent by means of a questionnaire to be filled in. In cases where the treatment required and whether the case is one suitable for treatment at home or abroad.

Invalids.

The Dockyard Medical Officer is to visit daily employees in lodgings or elsewhere who are reported by a hospital Board of Survey as being in need of such attention. The Medical Officer shall report on the lodging.

The Dockyard Medical Officer shall [illegible] the [illegible] concerning payment of Sickness and possession of [illegible] when the patient is able to return to work. The patient must be [illegible] Certificate. Representations [illegible] Admiralty [illegible] Medical Officer [illegible] work [illegible].

As regards [illegible] complaints may be sent to the Chief Medical Officer [illegible]. There are cases may be sent [illegible] work. Should [illegible] appear [illegible] the Lords Commissioners [illegible] Medical Referee [illegible].

Liaison Officer.

The Dockyard Medical Officer is to act as liaison officer between the Medical Officer and the Medical Officer of the Naval Hospital [illegible] respective Services [illegible]. It may be necessary to [illegible] the case [illegible] the Medical Officer [illegible] take.

Visits.

[illegible] are [illegible] the Dockyard Surgeon. Patients [illegible] Hospital as soon as [illegible]. Cases [illegible] progress [illegible] Visit [illegible].

Records.

The Dockyard Medical Officer [illegible] the [illegible] Hospital [illegible] the Medical [illegible].

Private Practice

[illegible]

CORONER'S HOME POISONING

[illegible] MEDSWOND RNVR

[illegible] PROSECUTOR

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Discussion

[illegible]

[illegible]

COMPLICATIONS OF ABDOMINAL WOUNDS — IMMEDIATE

By Surgeon Commander FRANK STABLER KNAPP

[illegible]

Wounds of Other Areas

[illegible]

[illegible] Surgeon Commander [illegible] 1942. [illegible] or tactical reports [illegible] the April number.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Retrospective [illegible] diagnosis [illegible] reconstruction

[illegible]

[illegible]

[illegible]

diaphragm he recovered [illegible] with a laceration of the [illegible] his liver had also [illegible] severe bruising of his descending colon and it caused his death [illegible] some days later. It [illegible] such an injury.

A [illegible] under [illegible] where [illegible] are [illegible] and sewing [illegible] feeding [illegible] needle [illegible] should be closed by passing [illegible] wisps of [illegible].

The [illegible]

There is an [illegible] of the per- [illegible] The [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

P[illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

AMŒBIASIS.

By Surgeon Commander J. G. Holmes, R.N.

[illegible]

[illegible]

[illegible]

[illegible]

The diagnosis having been established the problem of treatment arises. I have found the standard textbooks are not specifically helpful; they give a long list of a numerous drugs, some being always at the top. The most effective formula I have found seems to comprise nearly every drug in the list, as a formula taught by one of mine used to say "everything from Aconite and Belladonna down to Zinnerk." What in my experience the average clinical results is a sound line of therapy for the average case. I offer the following as one which I have employed with satisfactory results.

(1) When a case first comes under treatment, whether for the primary attack or for a relapse, I give a course of deep subcutaneous injections of emetine and ipecac for the grand daddy for five or six days. The patient must be kept in bed during and for at least a week after this course, because emetine is very toxic to the myocardium. The diet and general treatment must depend on the general condition of the patient.

(2) After an interval of about two days I give a course of Manson Babbs' Combined Treatment. This is emetine hydrochloride by mouth and Yatren, or one of its equivalents, retention enema. The dosage is as follows:

0800 Washout the lower bowel with a pint of saline. 2 per cent soda.

0830 Run very slowly into the rectum with a tube and funnel 8 oz. of Yatren 2 per cent solution. This should be retained for as long as possible and with encouragement and persevering efforts patients can hold it for eight or ten hours.

2 00 Emetine gr. 1 by mouth.

2200 Emetine gr. 1 by mouth.

This course is repeated as long as 2 days and the last evening meal given at 1830. Little food is taken during the course, and the patient must be kept in bed. The diet is given after the course is completed. The patient must be passed water also during the course.

(3) About a week later, during the convalescence, a light course of stovarsol is administered, one tablet 4 gr. by mouth daily before breakfast. The patient may be ambulatory during this course.

SUMMARY

(1) Attention is drawn to the diversity of symptomatology of amoebiasis.

(2) Two cases illustrating this point are mentioned.

(3) A suggested scheme of treatment is offered.

OBSERVATIONS ON SUNSTROKE AND HEAT EXHAUSTION IN HELICOPTERS

By Squadron Leader KENNETH S. McLEAN, R.N.V.R.

It has long been recognized by mariners and others in tropical seas that the rarer blood pressure experienced can be relieved by drinking water to a large extent. Physiological explanation has been offered. But pressure may also be the factor which is concerned in this country very little stress seems to be laid upon it in medical circles

Muscular Cramps. [illegible] cases. [illegible] cases [illegible] experienced [illegible] pain.

Headache. [illegible] generalized [illegible] these cases.

[illegible] Nausea [illegible] significance.

Dizziness. This is [illegible] symptom. [illegible] consciousness.

Rapid Respiration, Rapid [illegible]

Fever. [illegible] suggested [illegible]

[illegible] collapse [illegible]

[illegible]

[illegible]

When [illegible]

[illegible] greatest interest [illegible] available [illegible]

Of the [illegible] cases [illegible] during the subsequent seven months in the tropics, only one showed symptoms of muscular cramps. All these responded immediately to [illegible] and [illegible] cases were required to be

[illegible]

Rousing the Patient from Sunstroke or Heat Exhaustion

[illegible]

Precautions to Be Taken Against Sunstroke

[illegible]

A Case of Hemiplegia Complicated by Epilepsy

[illegible]

[illegible]

[illegible]

[illegible]

Summary

[illegible]

ROBERT McCORMICK, R.N.

[illegible] Naval Medal

[illegible], M.D., R.N.

Pneumonia

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

the Congress of Vienna [illegible] Mr. [illegible] 1827 [illegible] Navy [illegible]

[illegible] Sir Astley Cooper [illegible] Rev. Samuel Cooper [illegible] Great Yarmouth [illegible]. This slender link was employed to secure the interest of Sir Astley whose [illegible] good stead.

The [illegible] successful [illegible] 1827 [illegible] United [illegible] Hospitals of Guy's and St. Thomas's [illegible] 1827.

[illegible] Admiralty [illegible] assistant surgeon.

He did not however [illegible] April 18, 1828 [illegible] Dr. [illegible] Somerset House [illegible] examination [illegible] Portsmouth [illegible] His Majesty's [illegible] Warspite [illegible]

[illegible]

[illegible] expression [illegible] 1822 [illegible] Navy which had in 1822 passed [illegible] Dr. William Burnett [illegible]

Sir William Burnett [illegible] officers [illegible] Deputy Inspectors [illegible] Burnett was only [illegible] his own province [illegible] the

[illegible]

[illegible] Westminster [illegible] was [illegible] engaged [illegible] and [illegible] were forced [illegible] means [illegible] McCormick [illegible] established [illegible] 1821 [illegible] Navy [illegible] medical [illegible]

[illegible] Astley Cooper [illegible] was [illegible] the great surgeon [illegible] Northumberland [illegible] Rev. Sam. Cooper [illegible] Great Yarmouth [illegible] was [illegible] later. This senior talk was [illegible] Sir Astley [illegible] good [illegible]

[illegible] McCormick went to the United Borough Hospitals of Guy's and St. Thomas's under the protection of his new patron [illegible] Dec. 6, 1822.

[illegible] Albany [illegible] appointment as assistant surgeon.

[illegible] 1823 [illegible] John [illegible] Somerset House [illegible] Portsmouth [illegible] Board [illegible] Marines [illegible] St. John's Wood [illegible] *Queen Charlotte*.

[illegible]

[illegible] McCormick [illegible] Navy [illegible] 1822 [illegible] William Burnett [illegible] service [illegible] Dr. William Burnett [illegible] Inspectors [illegible] Burnett [illegible] province with the

[illegible] in charge [illegible] [illegible] When the [illegible] [illegible] to be superseded [illegible] the *Rattlesnake* [illegible] at Somerset House [illegible] to the North Polar Expedition [illegible]

Parry [illegible] James Bezer [illegible] surgeon [illegible] brought the gold medal of Sir Astley Cooper [illegible] the Medical School [illegible] November 1827 [illegible] HMS *Hecla* [illegible]

[illegible] Parry was [illegible] Lieutenant [illegible] Navy [illegible] 1827 [illegible] Street Auction [illegible]

The voyage [illegible] for a brief [illegible] Parry [illegible] except [illegible] Parry [illegible] sledges [illegible] McCormick [illegible] to equip himself with the knowledge [illegible] was [illegible]

On [illegible] from [illegible] surgeon for [illegible] passed [illegible] the Duke of Clarence [illegible] *Hecla* [illegible]

His promotion was on November 27th 1827 [illegible] rank for two years [illegible] half pay on a sure [illegible] and these [illegible] study [illegible] Mediterranean [illegible] Sussex Downs [illegible]

[illegible] Burnett's [illegible] December 1828 [illegible] *Hecla* [illegible] to Desolation [illegible] West Indies

McCormick however [illegible] Lieutenant [illegible] Royal [illegible] directed [illegible] Mrs Mason [illegible] 1830 [illegible] patients and was [illegible] same day

[illegible] ago [illegible] recent [illegible] hospital [illegible] which [illegible] that as [illegible] suffered [illegible] use her [illegible]

He took passage [illegible] sailed [illegible] King William's death [illegible] the street of Persian [illegible] After the [illegible] Vienna [illegible] Stepney [illegible]

[illegible] in November 1831 was [illegible] McCormick [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Sir John Barrow [illegible]

[illegible]

In 1854 [illegible]

In March 1855 [illegible]

By 1856 McCormick [illegible]

[illegible]

[illegible] 1855, 1856 and 1857 [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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[illegible] Journ. Roy. [illegible] Serv. 21 [illegible]

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[illegible] Medical Museums [illegible] 24 [illegible]

[illegible] McCormick [illegible] Nat. Hist. [illegible] 36 [illegible]

McCormick, Robert [illegible] Narrative [illegible] Clark [illegible] McCormick [illegible] R.N. [illegible] Hope [illegible]

[illegible] Antarctic Seas [illegible] Vols. 1 and 2.

[illegible] Voyage [illegible]

[illegible] College of Surgeons [illegible] Vol. 1

[illegible] Richards [illegible] 10

[illegible] 2

[illegible] 6

[illegible] Vols. 1 [illegible] 2

[illegible]

[illegible]

APPENDIX

[illegible] entry.

Ship	[illegible]	[illegible]	Years	Months	Weeks	Days
[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible] McCormick [illegible] Voyages of Discovery.

[illegible] of the [illegible]

[illegible] Norwich [illegible]

[illegible]

[illegible]

[illegible]

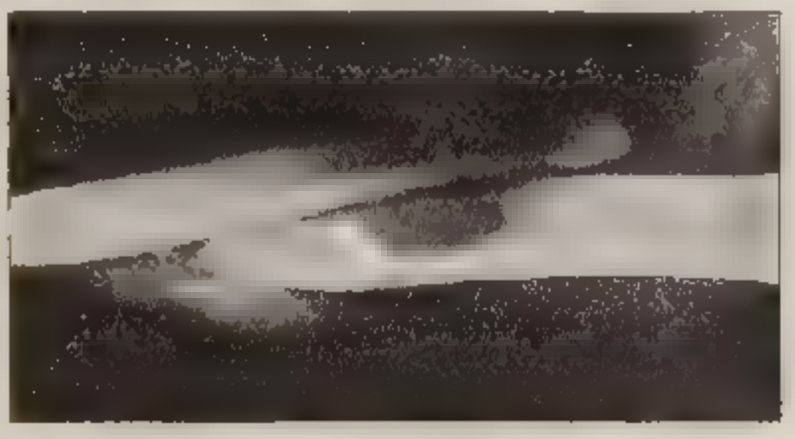
[illegible]

[illegible]

[illegible]

[illegible]

Clinical Notes and Cases



lessons [illegible] as follows: I [illegible] X-ray examination [illegible] in writing, [illegible] X-ray [illegible] close [illegible] the shape [illegible] worth, [illegible] arranging [illegible] appreciated [illegible] addition of [illegible] 100 per [illegible]

A CASE OF MALIGNANT DISEASE OF THE TESTICLE ADMITTED TO HOSPITAL WITH SYMPTOMS OF ACUTE INTRACRANIAL DISEASE

By Surgeon Lieutenant [illegible] VAN LANGENBERG, R.N.V.R.

The patient, [illegible], was admitted to R.N. Hospital, [illegible] 1941. The history, as far as could be ascertained from him, was as follows:—

He had been [illegible] for seven days prior to admission, and at the beginning of that period commenced to have headaches. These were frontal in site and were at [illegible] accompanied by vomiting [illegible] there was [illegible] and not [illegible] attacks and there was [illegible] history of [illegible] his vision had [illegible] that both eyes were affected.

On examination he had a temperature of [illegible] raised to 110. His general condition was very poor. Mentally he was drowsy, had to be roused [illegible] apart from complaining of intense headaches [illegible] central nervous system [illegible] gave a clear [illegible] of the [illegible].

In view of these findings a microscopic film of the [illegible] was taken [illegible]

Blood count.—R.B.C. 5,000,000; haemoglobin [illegible] per cent.; [illegible] W.B.C. [illegible],000; [illegible] 12 per cent.; [illegible] and basophils [illegible]. There was [illegible]

[illegible] it was thought that the condition [illegible] the absence of any history or clinical evidence of [illegible] it was considered that the primary [illegible] the lungs [illegible] although [illegible] chest was made and a deficient air entry at the left base [illegible] Skiagrams showed a very extensive [illegible] deposit affecting both lungs.

The diagnosis was now narrowed down to a [illegible] growth [illegible] prostate, testes, thyroid [illegible] examination showed that there was [illegible] of the left testicle which was hard and [illegible]. There was no [illegible] spread [illegible], and no enlargement of [illegible] glands [illegible] sent to the Edinburgh Royal Infirmary for an Aschheim-Zondek reaction, which was found to be positive.

Before [illegible] days after admission he developed a [illegible] in the left [illegible] passed into a condition of stupor [illegible] a few hours prior to death.

[illegible]

[illegible] ACTION

[illegible]

[illegible] all the organs [illegible] [illegible] body were [illegible]

[illegible] Weight of the heart was [illegible]

Respiratory system. [illegible] full of [illegible] The [illegible] were congested and [illegible] Each lung weighed [illegible]

[illegible] intestinal tract.

Nervous system. [illegible] were engorged [illegible] [illegible] muscle.

[illegible] typical of [illegible] by the Hartridge Reversion Spectroscope as 82.5 per cent [illegible]

[illegible] and the [illegible] of death [illegible]

[illegible] following procedure [illegible]

[illegible]

[illegible]

Case 3	84 [illegible]	[illegible]	[illegible]
Case 4	84	[illegible]	[illegible]
[illegible]	84	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	68
[illegible]	[illegible]	[illegible]	90

[illegible]

[illegible]

BIBLIOGRAPHY

[illegible]

[illegible] OF THE [illegible] OF [illegible]

By [illegible]

[illegible]

The patient further refused to [illegible] the leg [illegible] any fracture [illegible] period. [illegible]

The [illegible] was [illegible] [illegible] speedily [illegible]

[illegible] impossible to make him stay [illegible]

[illegible] was some [illegible] express [illegible] discharged [illegible] the median [illegible]

[illegible]

year.

[illegible]

[illegible]

[illegible]

[illegible] of the [illegible] signs of dehydration. [illegible] No [illegible] was normal.

[illegible]

Reviews.

[illegible]

[illegible]

News of the Service.

OBITUARY

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

HONOURS.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

RETIREMENTS, &c.

[illegible]

PROMOTIONS.

[illegible]

[illegible]

WARDMASTERS

[illegible]

ROYAL NAVAL VOLUNTEER RESERVE

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

QUEEN ALEXANDRA'S ROYAL NAVAL NURSING SERVICE

APPOINTMENTS

Miss [illegible] to be Matron, November 1942.

Miss [illegible] to be Matron, Royal Naval Sick Quarters, Stoke, [illegible] 1942.

[illegible] to be Matron, [illegible] 1942.

[illegible] to be Matron, November 18, 1942.

[illegible] Miss [illegible] to be Matron, October [illegible]

[illegible] Miss [illegible] to be Matron, Royal Naval Sick Quarters, [illegible] November [illegible] 1942.

[illegible] Miss M. [illegible] to be Matron, Royal Naval Sick Quarters, [illegible]

[illegible]

[illegible] Miss J. [illegible] to be Matron, [illegible] Ashley [illegible] 1942.

[illegible]

[illegible]

[illegible] Miss C. [illegible] to be Matron, [illegible]

[illegible] to be Matron, [illegible] October 17, 1942.

PROMOTIONS

[illegible]

RESIGNATIONS

[illegible] Sister Miss [illegible]

Notice.

The Editors invite Medical Officers to send in Original Papers on professional subjects, travel, personal experiences, &c. Items of news and matters of interest to the Naval Medical Service will be welcomed from ships and establishments on home and foreign stations.

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Journal

of the

Royal Naval Medical Service.

Articles.

ONE HUNDRED YEARS OF COMMISSIONED RANK

By Surgeon Commander [illegible] R.N.V.R.

[illegible]

[illegible]

[illegible]

[illegible]

Sir William Burnett, the first Medical Director-General of the Navy, though he was not given that post until 1844, was a Scotsman from Montrose who had entered the Navy originally as a surgeon's mate. He was promoted surgeon in 1800 and took part in the battles of St Vincent and the Nile under Admiral Sir Edward Pellew. In 1804 his abilities were at last to be recognized. He was given a hospital post ashore. Six years later he was appointed Physician to the Mediterranean Fleet which entailed supervision of the Royal Hospital at Malta and care of the sick and wounded in those waters. He followed in this responsible post from 1812 until his return home. In 1822 he was appointed a member of a committee to report on medical abuses, along with Dr Weir, on the Victualling Board. He was then appointed to Dr Weir in 1825 and promoted Burnett to the position for election as President-General. The new President was elected a year later and was the first President of the RCS. In 1835 he was appointed physician to William IV and in 1836 elected a Fellow of the Royal College of Physicians. He did not [illegible] but he was very active [illegible] 82.

[illegible] very fair account [illegible] he was chiefly [illegible] Duke of Bedford, Prince Albert and Queen Victoria, [illegible] letter to Naval [illegible] a treatise on Mediterranean [illegible] preserving timber and canvas [illegible] the time of the first Great War. But [illegible] was new. Burnett [illegible] in his [illegible] his [illegible] Royal Hospital [illegible] Burnett [illegible] was appointed to the Navy from 1846–1854, [illegible] considerable [illegible] received on the subject. He writes [illegible] Medical [illegible] Society. I feel that I owe [illegible] It was not [illegible] the publication of Hawkes's work and [illegible]

[illegible] the surgeons in the Navy at the first half of [illegible] supply of warrants that foreign [illegible] Russian practice [illegible] surgeon [illegible] Russian Navy [illegible] in 1800 complained of assistants [illegible] entertained a hope of becoming first [illegible] most [illegible] English [illegible] surgeons [illegible] in 1797 [illegible] surgeons in the Navy still [illegible] hundred years [illegible] attempt [illegible] in 1798 a surgeon went [illegible] HMS [illegible] he had been appointed [illegible] was greeted [illegible] said. That he was surgeon himself and had [illegible] that surgeon was allowed and that he voted [illegible]

[illegible] the surgeons [illegible] 1804 when it was agreed [illegible] expense. Turnbull thinks that [illegible] through [illegible] Nelson's [illegible] in the welfare of the naval surgeons that in 1805 [illegible] were persuaded to present a Memorial to the King [illegible] Melville, First Lord at the time [illegible] memorial [illegible] getting medical men to enter the [illegible] unfavourable conditions existing for doctors in the Navy [illegible] Artificers and [illegible] The memorial was favourably received, the Board [illegible] receiving a reply that [illegible] His Majesty taking the said Memorial into [illegible] several proposals

[illegible]

[illegible]

tion before they could be considered for promotion to surgeon. Until 1867 this examination was held under the auspices of the Royal Colleges of Surgeons of London, Edinburgh or Dublin, but after that date it was conducted by a naval medical board and held at Somerset House. To improve the status of the more senior surgeons, the rank of Staff Surgeon was created February 28, 1855, between that of Surgeon and Deputy Inspector General, and equal to that of Commander in the Service were elevated Honorary Physicians or Surgeons to Her Majesty the Queen (1859). It was the examination of these reforms, brought about under Sir Thomas Phinn's administration as First Lord of the Admiralty, that induced Dr. Brown to enter the Navy in the year 1858.

Encouraged by the entry into the Naval Medical Service, however, unofficial to fall in Service had acquired a bad name, a further official inquiry was held in November 1865 to inquire into the causes of its unpopularity. The committee consisted of Vice-Admiral Sir Alexander Milne, K.C.B., Major-General Lord William Paget, K.C.B., Admiral General Captain Douglas Galton, F.R.S., Assistant Under-secretary of State for War, Sir James R. Gibson, K.C.B., Medical Director-General of the Army, Dr. Alex. Brewster, C.B., Medical Director of the Navy, Dr. William O. Markham, F.R.C.P., and Mr. George Busk, F.R.S., a Member of the Council of the Royal College of Surgeons. Dr. Brewster stated that there had been for several years past only three applicants had come forward. He gave the following table of figures which show the unsatisfactory state of the recruitment of a service persecuted by a queer old dog.

A statement of the number of candidates presenting themselves for the medical Service between January 1856 and the second quarter of the year 1865, showing the number of their examinations

Year	Examination for Surgeon			Examination for Assistant Surgeon	
	Passed	Failed	Total	Passed	Failed
1856	27	0	29	6	
1857	9	4	6	9	
1858	3	4	2	7	
1859	28	8	6	22	2
1860	25	6	8	6	2
1861	25	1	6	20	3
1862	19	14	5	25	
1863	15	11	8	25	3
1864	10	4	14	2	
1865	4	1	5	7	
Totals	186	26	137	58	3

Medical officers serving at the time were brought forward and their evidence taken as to the origin of the alleged grievances and the difficulty in obtaining new entries.

I was asked if I had any suggestions to make. One assistant surgeon was asked: "Now, Mr. Jones, what do you think, as an assistant surgeon, is bad?" I looks as if we were after them.

"A very important question is that we ought to have an opportunity of rubbing our studies occasionally. Take for instance the case of the assistant surgeon in charge of a hospital ship, he must settle down to his work entirely, and at that time he has no opportunity of going to a hospital where he could get some assistance and advice from the rest of the world. In which case I think it would be fair to give one a certain amount of time to pay [illegible] studies in hospital."[1]

Pay and other similar complaints relating to non-payment of prize money, travelling allowances, absence of [illegible] accommodation, not formed the main text of the grievances. Therefore, Mr. William Richard Edwin Smart, Assistant Inspector General in charge of Greenwich Hospital, summed up the situation by saying that he considered the difficulty of obtaining medical candidates for the Service was due to: *a*. The decreased numbers entering the profession; *b*. the wider spheres of activity; *c*. the favourable conditions

[1] The writer of the well known treatise on West African Fevers.

[2] This discussion is of interest because in 1867 it was agreed that study leave should be granted to assistant surgeons who had completed their five years service with a view to assist in their chances of passing the examination for promotion. It would appear therefore that the privilege was given without

[illegible]tered in the emigrant service, in the packet service, and [illegible] appointments abroad. As a result the committee observed that further reforms must be introduced, among which were the following: (a) An increase of pay, more liberal [illegible] with regard to [illegible] pay; (b) improved rates of travelling allowance, [illegible] and servant allowances; (c) the title of Staff Surgeon to be recognized as a distinct rank; (d) [illegible] the [illegible] surgeon [illegible] prize money to be distributed among medical officers as among other officers and that [illegible] be provided for their use in ships; (e) a period of five months sea [illegible] be granted to assistant surgeons after [illegible] and before promotion to surgeon.

Other changes and reforms were effected gradually after this date. There were further increases of pay in 1868, and in 1873 the title of assistant surgeon was abolished, a medical officer coming [illegible] the surgeon [illegible] dates of joining with [illegible] seniority. Surgeons were graded into two groups according to the length of their service, second and first class. Staff surgeons and the rank of Fleet Surgeon was created between that of Staff Surgeon and Deputy Inspector General [illegible] memorial presented to Her Majesty the Queen and the Lords Commissioners of the Admiralty. Surgeons in the service were automatically promoted to Staff Surgeons and Staff Surgeons to Fleet Surgeons. Deputy Inspector Generals were placed on a [illegible] with Rear Admirals, Inspector Generals with Vice Admirals, and Surgeons with Rear Admirals. These alterations completed a chain of reforms upon which the status of the modern naval surgeon is based. Since then the pay has been further increased, the examination for promotion to staff surgeon has been abolished, promotion has been accelerated, medical officers serving six years as surgeon and six years as staff surgeon before promotion to fleet surgeon, opportunities for study leave have been extended, specialist rates recognized and, at the same time, the executive titles have disappeared and have been replaced by titles denoting the corresponding executive rank with the medical surgeon.

Surg. Lieut. 1918	Surg. Commdr. 1918	Surg. Commdr. 1918	Surg. Rear-Admiral Surg. Capt. 1918
Surgeon 1873	Staff Surg. 1855	Fleet Surg. 1873	Deputy Insp. Gen. Inspect. Gen. 1849
Asst. Surg. Asst. Mate 1865	Surgeon [illegible]	[illegible]	
Surgeon's Mate 6th, 17th cent.	Surgeon	Surgeon	Surgeon

Anyone interested in the expansion of the Naval Medical Service had to wage or recognize [illegible] wonder why it was that the Navy allowed its sister service, the Army, to effect medical reforms so many years in advance of its own adoption of them. The question is difficult to answer, but it is probably bound up with a number of facts. The nineteenth century was a period of comparative [illegible] in which the sea diseases had been overcome partly by the efforts of the pioneers of the eighteenth century, partly by the introduction of steam and the consequent alterations in the mode of life at sea. There did not seem to be the same necessity for doctors in the peaceful nineteenth century as there had been in the previous hundred years. It required some striking testimony of the inadequacy of the Service to move the authorities to action, and physicians required the heavy mortality from the sea diseases in the early part of the eighteenth century to wake up the deficient organization of the seventeenth century. So it was not until the number of medical officers showed signs of falling dangerously low, and fatal errors were introduced in the nineteenth century. The medical officers themselves may also have been partly to blame for the indifference of the country to their needs. Instead of emphasizing their deficiencies in the professional sense, they laid stress on the questions of pay, status, rank, relatively unimportant aspects which carried more weight. As one of their number, Robert Robertson, Physician to Greenwich Hospital, wrote in 1807: "I have made a mistake in dwelling on the smallness of their income and profits."

As early as 1734 the importance of encouraging the surgeons to maintain a high standard in professional matters had been emphasized by the Company of Barber Surgeons, who directed: "That all extraordinary cases in surgery described in the Sea Surgeons' Journals should be marked by the Governors [illegible] and be entered into a Book [illegible] and should

[illegible]

[illegible]

NOTES ON THE PAINFUL FOOT

[illegible]

[illegible]

For the latter paring is required. In the case of hyperkeratosis the superficial layers can be softened by the application of [illegible] for two days, and the paring becomes a easy matter. It is important to remove the hard cone-shaped core in this [illegible] tenotomy knife and a small pair of dissecting forceps are all that are required.

These conditions must be carefully differentiated from the *painful warts*. These are usually multiple in appearance as small localized coalescent areas within the surrounding certain portion of the adjacent [illegible] treatment but X-ray therapy [illegible] CO_2 snow has been [illegible].

Of the other conditions affecting the toes generally the *[illegible]* is common. It may exist in the form of a [illegible] rheumatism or in one of the various types of arthritis deformans, the forefoot is especially [illegible] later in this matter.

[illegible]

Plantar fibroma is at other times [illegible] the sole region [illegible] not necessarily [illegible]. This pain is [illegible] worse after rest and is especially severe in the early morning. A most [illegible] present after [illegible] be elicited in the history [illegible] treatment consists of rest, [illegible] application and radiant heat to the area.

Forefoot. The [illegible] structure of this portion of the foot consists of five parallel metatarsals of which the largest is by far the most important. In the process of walking the head of the bone is the fulcrum upon which the body moves forward, hence its bulk to enable it to carry out such a proportionately large task. Its position anterior to the other heads

The metatarsal heads are bound together by various ligamentous and muscular attachments which may or may not form an interosseous [illegible]. The part played by the intermetatarsal [illegible] is a matter of the power of the muscles of the region to maintain the normal relationship of the heads. Should this fail the heads will tend to spread and be subsequently held by the ligaments in a lateral position. Besides the static tone of the muscles at the back of the first metatarsal head enhances the strength of the flexor hallucis brevis and keeps it give at least the appearance of an arch in this region.

But a more interesting theory [illegible] the part of the foot helps to simplify the classification of painful conditions here. He suggests that in certain cases there is a reversion of the foot construction to an earlier stage of the embryonic scale, that is, to a lower grade or some degree. The essential feature of this degeneration is a shortening of the first metatarsal [illegible] or incapable of being moved to a varus position relative to the second metatarsal. In such cases [illegible] hereditary [illegible]

[illegible] the second metatarsal.

[illegible] to take on the function of its more important neighbour and further compensation occurs by a proportionate [illegible] of the muscular [illegible] the foot.

Those people in whom this [illegible] of *metatarsus primus varus* exists are particularly susceptible to foot lesions, especially if their occupation is sedentary and does not require the foot for [illegible] strains that it may have to undergo as in service training.

The stresses on the foot arch are shared by all its constituent members and if these are unable to compensate against excessive pronation the ligamentous structure is first to give way. This means a stretching of the intermetatarsal ligaments and the condition of *anterior arch strain* obtains. Obviously this must be treated by cessation of the strain-producing factors and by re-

stiffness of the joint, especially for dorsiflexion, and is known as *hallux rigidus*. However, it is more often found in conjunction with other deformities, where the long internal and external rotators are relatively overdistended, and the first metatarsal hence it is impossible to dorsiflex the toe. Rather in extreme cases a complete flexion is assumed in a completely stiffened joint, the so-called *hallux flexus*.

It is typical of all these conditions that walking, the task for which the foot is fitted, gets worse as the joint stiffens.

The treatment of all these conditions resolves itself into treatment of the osteoarthritic condition. Palliative measures will give relief, temporarily, from the pain including adjacent bursitis, and relief of the joint by rest during more severe exacerbations.

Where the pathological changes are more marked, in hallux rigidus, some form of arthroplasty is required, involving the removal of a slice of the joint surfaces. The excision of the base of the proximal phalanx does not interfere so much with foot mechanics as removing the head of the metatarsal, but this latter is to be recommended unless the destructive processes are in the metatarsophalangeal joint.

The same argument holds good for those cases where the arthritis is associated with deformity, either as a result of the hallux valgus or hallux flexus. In the less severe case a positive bunion may be taken in attempting to correct the deformity by an operation. In the absence of the more bizarre types of proprietary splint, orthoplasts may be used, but in many cases these measures are merely temporizing, and it is difficult to stop the deformity increasing. The operation which I am with to urge in this view of the painful changes that occur with the suggestion of metatarsal secondary wisest to use some type of corrective arthroplasty, the operation which consists in the soft tissues. The author has no case regarding the simple excision of the base of the proximal phalanx. If bursa is present, either it exists in one not recently inflamed, or it is impinged forward between the two bones, and a sizable exostosis should be removed.

The post-operative care is extremely important. The wound should be left severed [illegible] the [illegible] of the [illegible] tissues [illegible] for [illegible] over [illegible] months. Immediately after walking is permitted, massage and physiotherapy are useful. [illegible] suitable [illegible] supports and slings are useful many because of the [illegible] pressure [illegible].

In Service cases, we have [illegible] of the [illegible] where it is the extent of [illegible] that requires [illegible] make [illegible] the man is [illegible] there will be [illegible] the [illegible] which is [illegible]. The pain [illegible] will be [illegible] to [illegible] will be [illegible] [illegible] interest in [illegible] deferred even in the presence of severe chronicity. The Service [illegible] more [illegible] categorizing [illegible].

A word [illegible] the fractured sesamoid of the flexor hallucis brevis. It is [illegible] from a slight mishap, taking the weight on the head of the foot. It should be remembered that it is most [illegible] to the medial sesamoid.

Malfoot [illegible] important [illegible] the [illegible] of the [illegible] here.

For example [illegible] the [illegible] the [illegible] weight [illegible] of the lower limbs [illegible]. The [illegible] muscles play an extremely important part [illegible] support for the leg [illegible]. Now [illegible] possible [illegible] voluntary control [illegible] results that [illegible] gives the [illegible] supported [illegible] stability [illegible] power [illegible] form, the [illegible] suggested [illegible] pain [illegible] established [illegible] stage [illegible] fitting [illegible]

AMNESIA[1]

By Surgeon Lieutenant-Commander [illegible] Stephenson, R.N.V.R.

The object of this paper is to present certain aspects of amnesia which I have based on material which has been personally seen in hospital, but these will be found to be personal impressions. I will also include however some views of two other Neuro-psychiatrists who are stationed in Depots.

It is noticeable that cases sent from hospital from the whole more likely to be genuine than those seen in barracks because the more [illegible] cases are [illegible] before they reach hospital. Further the amnesia is often of longer duration or patients have been treated in men's [illegible]. Fugue states somewhere. Accurate numbers are not given but on the whole they have been surprisingly few both in Depots and hospitals. For example at one Depot amnesia is I am told almost unknown, while at another [illegible] amnesia for being identified was [illegible] overworked right [illegible] investigations.

Of the cases seen by far the greatest proportion are psychogenic in origin. I have however to have amnesia as the sole symptom that I have ever had. There was a case I saw recently seen where the amnesia was clear recognition was found to be the only psychiatric symptom. However it is nearly always associated with other factors. The chief of these I think are as follows:

(1) *With an anxiety or a pressure* and with the latter more frequently than the former.

2. *With a post-concussional state.* These are common in the possible the most frequent background for complete amnesia in service men. There is almost always, however, a hysterical elaboration.

(3) *With a previous history of amnesia* or [illegible] amnesia in a patient seeming to slip [illegible] according to the amount of stress he was under at the time.

4. *With a mental defect* or where poor intellectual environment or development is present.

(5) *With a psychopathic personality.* These are [illegible] where the amnesia is likely to be more [illegible].

6. *With a neurotic tendency or personality disorder* even though the latter may only have been present in childhood.

7. Association with a previous [illegible] to escape difficulties by [illegible] assert a reaction [illegible].

(8) Lastly alcohol is sometimes a factor being frequently resorted to on account of an anxiety or depressive state by individuals of a [illegible] personality who have to face demands which are for the moment beyond their [illegible].

There is, of course, frequently a combination of some of these factors.

Differential Diagnosis. An attempt to make a summary reflecting the differential diagnosis of the conditions that appear to fall under the [illegible] headings.

(1) The first group [illegible] *Hysteria, malingering* [illegible] briefly discussed below.

2. *Post-concussional cases*, that is those which are psychogenic in origin [illegible] where the amnesia may be retrospective or repressive of [illegible] emotions and [illegible] to [illegible] the future difficulties [illegible] really [illegible].

3. *Organic.*

4. *Degenerative.*

5. *Psychotic.*

With regard to the first two groups, I believe that there is no definite line of demarcation between them, but that one gradually merges into the other. At one end of the scale there is the man who has been [illegible] in hospital. It is more frequently seen in [illegible] men, though less so in [illegible] than in [illegible]. The [illegible] power [illegible] the Navy [illegible] first [illegible] RN [illegible] I [illegible] the following [illegible] I think [illegible] of depression [illegible] anxiety [illegible] sick [illegible]

[1] Being a paper read at a Conference of Naval Psychiatrists [illegible]

fit to meet the demands made upon him, and if he is considered unfit to meet all demands a report is sent to his Depot when he returns to duty with a recommendation as to the type of service for which he is considered fitted.

Lastly the question of punishment. In the Home Naval Depots and Hospitals the same view is taken. Because the man has had an amnesia, whether genuine or not, it does not mean that he evades punishment. The whole psychiatric picture is taken into consideration and any extenuating circumstances. If the condition is considered such that he needs treatment and was not responsible for his absence then treatment is recommended and it is put forward that disciplinary action should not be taken. Otherwise he is considered fit for punishment. Of the eight cases previously mentioned, during a period of five months in Depot where the plea of amnesia has been put forward as an excuse for desertion, only three were recommended for leniency.

Management on these lines, I believe, will keep the problem of amnesia within control and the story will not go round that such a plea will get a man off his just punishment.

SUMMARY

Some of the aspects of amnesia as seen in Hospitals and in Depot are discussed.

The association of amnesia with other psychiatric conditions is considered.

Differential diagnosis is briefly summarized.

The management of the patient and his treatment with a view to reducing the growth of the condition are reviewed, and the question of punishment considered.

In the discussion of these cases I tender my acknowledgement to Surgeon Lieutenant Commander Cameron, R.N.V.R., and Surgeon Lieutenant [illegible], R.N.V.R., who have both been most helpful.

LOSS OF MEMORY

SURGEON LIEUTENANT-COMMANDER H. SCOTT FORBES, R.N.V.R.

MEMORY operates by the process of association, by which I mean not only association of ideas but also association with emotional content. [illegible] these associations, providing they have a [illegible] into consciousness is prevented by repression. This power of forgetting things [illegible] remembered, is [illegible] protective mechanism [illegible] of which we have every reason to be grateful. There is no dividing line between normal and abnormal forgetting [illegible] this mental process; the difference is one of degree only.

Psychiatrically [illegible] the grosser psychological amnesias [illegible] be taken as a whole. [illegible] leaves his ship on short leave [illegible] but two days later he returns [illegible] please perhaps [illegible] and remembers [illegible] walked [illegible] loss of memory [illegible] two days. There [illegible] during these two days [illegible] not only has [illegible] a fact that [illegible] other men [illegible] performed [illegible] onset is [illegible] according to the patient's [illegible] the two days have [illegible] consciousness or a state of hysterical dissociation [illegible] the period. With [illegible] I am not in agreement with the view [illegible] earlier [illegible] reaction [illegible] if an amnesia is proved

---

[illegible] paper read at the Inter-Services Conference of Neuro-psychiatric Specialists.

[illegible] suggests that [illegible] the [illegible] injury [illegible] the least sign [illegible] It would be interesting to know if anyone can [illegible] between past [illegible] states. The [illegible] of the retrograde [illegible]

[illegible] [illegible] have not [illegible] two cases of [illegible] I [illegible] prepared to [illegible] whether they are [illegible] or merely coincidence.

[illegible] after a long and strenuous period [illegible] corresponding hard times at [illegible] strange [illegible] been [illegible] stable [illegible] an amount of [illegible]

[illegible] of a case [illegible] My [illegible] I was [illegible] remember [illegible] a short period [illegible] anxiety [illegible] were [illegible] completely [illegible] period [illegible] some [illegible] stage [illegible] been [illegible] came [illegible] two weeks.

[illegible] [illegible] for [illegible] a problem [illegible] I [illegible] epileptics [illegible] reduce the [illegible] assumptions.

Proof [illegible] loss of memory [illegible] the exciting [illegible] in proportion to the amount of [illegible] other attacks of amnesia, that is in proportion to [illegible] past experience that [illegible] provides [illegible] It also is proportional to the [illegible] exciting [illegible] at the [illegible] interview.

[illegible] I consider it is not worth mentioning how this attitude [illegible] affects the treatment [illegible] cases I have [illegible] 2 per cent [illegible] such [illegible] I have so far [illegible] of treatment.

[illegible] assist a person remaining [illegible] that such an amnesia [illegible] necessary escape [illegible] the patient [illegible] Mental [illegible] that the first [illegible] committed [illegible] the [illegible] disposal [illegible] of [illegible] treatment [illegible] Nevertheless [illegible] barracks [illegible] that [illegible] advantage [illegible] amnesia [illegible] attitude [illegible] reference [illegible] referred [illegible] carry [illegible] out the investigation [illegible] this does not matter [illegible] correlated [illegible] course of time [illegible] actually [illegible]

Cases that are [illegible] to [illegible] of time [illegible] discussed [illegible] strapped [illegible] and [illegible] treated [illegible] proper investigation.

[illegible] COMPLICATIONS [illegible] ARGOMINA [illegible] NDS

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

SKIN DISEASES IN H.M. SHIPS

[illegible] WHITE [illegible]

[illegible] H.M. ships [illegible] supposed [illegible] particularly [illegible] on the attending list [illegible] of [illegible] skin diseases [illegible] lost [illegible] attending [illegible] sick [illegible] treatment [illegible] spent [illegible] considerable.

[illegible] extent [illegible] cases [illegible] responsible [illegible] the sick bay, [illegible] own [illegible] experience [illegible] with a total complement of 850. [illegible] this [illegible] cases were treated [illegible] it was found that the number of patients was [illegible] out [illegible] where the number attending [illegible] conditions [illegible] between twenty and [illegible] attending cases, the number of days sickness [illegible] skin patients was nearly a third of the total days sick, although the [illegible] number of cases treated on the sick list was only [illegible] of the total [illegible] cases sick.

It was also found that [illegible] were sufficiently severe to require hospital treatment, the time spent in [illegible] was considerably longer than for most other diseases. This applies particularly to ships carrying [illegible] but, [illegible] the number of cases is less, the time spent in hospital for skin diseases is still large.

Special treatment rooms for treating skin diseases. [illegible] the treatment of patients on board a separate [illegible] was found to be successful, with one sick berth attendant to act as [illegible] the treatment. In this way [illegible] treatment can be carried out [illegible] the same time [illegible] the sick berth attendant [illegible] in charge of treatment.

Diseases common [illegible]. [illegible] the following notes on diseases no attempt has been made [illegible] the diagnosis is usually simple, and the main concern is treatment.

The treatments [illegible] as far as possible to preparations found in the scale of medicines or [illegible] available. [illegible] cases will [illegible] to quite simple [illegible] the [illegible] knowledge of the effects of a few preparations is [illegible] that [illegible] knowledge of [illegible] particularly true in skin cases. [illegible] the [illegible] effects of a drug is important as knowing what one can expect from it.

[illegible] An [illegible] case of [illegible] gave no [illegible] in diagnosis but [illegible] the presence [illegible] mistakes.

In [illegible] widespread [illegible] lesions with [illegible] of [illegible] even if no [illegible] was [illegible] in the [illegible] one of the common sites for scabietic [illegible] which seems [illegible] the penis, and the [illegible] lesions were in an otherwise doubtful case of great help in diagnosis.

At the same [illegible] it must be remembered that an [illegible] scabietic lesion on the penis may [illegible] the presence [illegible] the source of infection being the same as that of the scabies [illegible] the [illegible] typical, and [illegible] only be found with difficulty.

I have recently seen [illegible] of this type which [illegible] infected [illegible]. The first [illegible] to the possible presence of [illegible] was [illegible] dark ground examination [illegible] positive [illegible] test was found.

[illegible] treatment [illegible] depends on what is available, and success with [illegible] liquids [illegible] properties [illegible] the treatment as or the substance used.

One [illegible], not [illegible], is considerable use in the treatment of infected eczematous [illegible] in the treatment of a relapse since it does not have the same tendency to [illegible] among [illegible].

Here, [illegible] ointment [illegible] treatment [illegible] gives rise to some unfortunate results. It requires [illegible] about three days after [illegible] of treatment, and the patient comes back with the [illegible] he has started [illegible] again, and if not examined closely, he may be [illegible] treatment [illegible] result that [illegible] worse still.

If there is any doubt whether the condition is [illegible] the best thing is usually to use calamine [illegible] or any other calamine preparation. If there is much dryness and cracking and not a repeat antiseptic treatment for at least ten days. A good dry calamine lotion is [illegible] cracks instead of drying, and works quite as well.

Disinfection of clothing may be sufficient [illegible] sterilizer, but satisfactory results may be obtained with formalin, the clothing being exposed to the vapour for twenty-four hours.

It is said there may be necessary to send a case of scabies to hospital for treatment since an important treatment is quite successful and the origin of [illegible] is doubtful. [illegible] that patients are discharged [illegible] that the [illegible] that [illegible] in hospital [illegible] relapse. If treated [illegible] remain at work and [illegible] treatment [illegible].

Epidermophytosis. Fungus infections [illegible] spread easily among [illegible] wet bathing [illegible] periods [illegible] it may not be possible for [illegible] as may be desirable.

The type of disease [illegible] more resistant to treatment than the [illegible] the skin [illegible] the area [illegible] considerable.

The results to the disease are [illegible] if the lesions are [illegible] be prevented [illegible].

In addition to the lesions caused by direct spread of the fungus there may be eruptions, especially vesiculation of the skin. These may appear practically anywhere on the body and be of various types. The important fact is that the primary lesion may be so severe that [illegible] treatment [illegible] when these secondary lesions appear and [illegible] treatment [illegible].

Although there [illegible] for the use of [illegible] is generally [illegible] 2 per cent. [illegible].

In [illegible] ointment [illegible].

A large [illegible] should be [illegible] throughout. It may [illegible] that the wort [illegible] the skin [illegible] become [illegible].

In [illegible] cases [illegible] powder with [illegible] powder [illegible].

If there is [illegible] Wattle [illegible] and if the skin [illegible] the [illegible] persist [illegible].

[illegible] this [illegible] closely resembles the [illegible] appears to be worse [illegible] treatment [illegible] weeks [illegible] the [illegible] tried it is worth trying [illegible] the [illegible] are [illegible] the [illegible] treatment [illegible].

Eczema. [illegible] the [illegible] the [illegible] the skin [illegible] 2½ per cent. and 10 per cent. [illegible] 2 per cent. in water works almost as well.

[illegible]

[illegible]

THE PREVENTION OF UNNECESSARY CASUALTIES IN WARTIME

By A. [illegible]

[illegible]

[illegible]. It is generally agreed that the prone position with [illegible] either downwards, the face [illegible] covering the ears, is the best for withstanding bomb blast and blast from underwater explosions. The importance of assuming this attitude during [illegible] But a tour [illegible] mess decks [illegible] will reveal [illegible] people in all sorts of weird postures [illegible] standing [illegible] sitting with [illegible] and knees [illegible] low positions. It is partly [illegible] the man who is always wanting [illegible] the [illegible] to look at the [illegible] where the man [illegible] surface [illegible]

[illegible] Casualties [illegible] Ship. [illegible] settling on [illegible] best one [illegible] when [illegible]

If the [illegible] settling [illegible] the descent down the side [illegible] hands [illegible] as possible [illegible] injuries from the bilge keels. Many fractures of [illegible] have been caused by them.

[illegible] water [illegible] It has been recommended that [illegible] the nose and [illegible]

However [illegible] passage [illegible] should be [illegible] before entering the water.

[illegible]. Whatever [illegible] there [illegible] place for the lifebelt [illegible] water [illegible] But [illegible] *[illegible]* [illegible] retracting [illegible] places. [illegible] are extra [illegible] careless [illegible] suffer [illegible] in this respect.

[illegible]. It seems [illegible] answer [illegible] kept under observation and [illegible] danger [illegible] This [illegible] strong [illegible] perfectly [illegible]

When [illegible] should be encouraged [illegible] the officers [illegible] someone will [illegible] life [illegible]

[illegible] of Dr. Macgregor Williams [illegible] 1364 [illegible] simple [illegible]

Another [illegible] climbing into a [illegible] fingers. The stronger [illegible]

[illegible] some [illegible]

Some [illegible] light [illegible] by floating [illegible] in the water [illegible]

Survivors should be warned to stay together, organised and go off on their own. The companionship is good for morale, help can better be rendered to those in difficulties and the task of the rescuers is made easier.

If survivors have been in the water for any length of time a period of particular danger is when they actually arrive alongside the rescuing ship. It seems as though the last bit of physical energy goes and very marked exhaustion results. A man may literally be seen alongside in the water one moment and the next he is in the ship. The rescuers should be on the lookout for this and get the survivors on board quickly. If possible men should be actually in the water at the bottom of the rescue nets to help the first few steps of those who can climb by themselves or to attach ropes to those who cannot. Everyone should be able to tie a bowline or bowline on the bight quickly, but still easier is the use of a rescue loop.

To make this an eye splice is put round the end of a comfortable thick piece of rope. The free end is passed through the eye, which is then allowed to slide up until it is stopped by a fixed knot. The loop so formed should be the size of an average man's chest. It can be slipped over the head of a man and drawn taut in an instant.

The long frontal cuts of the wind are still prominent, lower neck, nature and present a source of danger. When the eyes are wet with sea water and salt the swelling down in the eyes and the inability to see at the start is a moment. The rescuers have to use the hand with which the swimmer is trying somewhat to brush the hair out of his eyes. I believe that some commanding officers of small craft, Motor Boats and Motor Launches are issuing their men to grow their hair long to give the rescuers something to catch hold of. I do not agree with this view because the dangers of obscuring vision are too great and because a mass of oily hair does not give a good grip anyway. They could, however, compromise by cutting the hair short in front and growing a top knot. In any survivor a great mop of hair is much more a hindrance than a help.

Everyone should carry a knife in his bath chest and a whistle is also a most valuable adjunct. An ability to make a clear splitting two finger whistle is a useful.

Precautions for Unnecessary Casualties in Lifeboats. After traveling in transports it is most desirable that each one should make some *personal* preparation for taking to the boats. This precaution is not universally taken. It was recently traversing from the Middle East to U.K. with [illegible] Representative Naval Craft. Everything in accordance with the ship's orders, carried in the jacket at all times. Thus implied that the chance of possible sinking were known and accepted. Small [illegible] single [illegible] and were all *personal* preparations for taking to the boats. A small bag with some [illegible] containing a bottle of water, a few boiled sweets and perhaps a small tin of food could be carried advantageously.

Prevention of Unnecessary Psychiatric Casualties. Although this is an thing is a growing experience it is much better to psychiatrists tell it think about it and talk about it for days or weeks after and it has lost its interest rather than try to make a deliberate attempt to forget it. Many people try to make this [illegible] and [illegible] pleasant thoughts and memories are thereby [illegible] as well as [illegible] the Medical Officer after a strenuous [illegible] shaking [illegible] keep the ball from scener rolling out in the wards and in the [illegible] lockers [illegible] of the subject and the subconscious [illegible] ventilated.

Prevention of Physical Fatigue. In an emergency in modern warfare [illegible] not physically fit and tough is too young [illegible] able to pull his weight during the fighting or take [illegible] certain as [illegible] of [illegible] The Medical Officer is constant observation of the ship's company. By playing games and taking part in endurance tests with them [illegible] that those who are not [illegible] in [illegible] to them and suggest [illegible] what [illegible] fitness.

The Prime Minister [illegible] about the dangers of [illegible] complacency [illegible] Platitudes like the spirit is willing [illegible] shall [illegible] light [illegible] wistfully [illegible] that [illegible] remains [illegible] one is not in [illegible] knows [illegible] as soon as possible. B[illegible] fitness [illegible] ability [illegible] play some special [illegible]

[illegible] muscular actions which [illegible] as we [illegible] the [illegible] standard of [illegible]

[illegible] able to ensure [illegible] the muscles of the [illegible]

[illegible] been made [illegible] increase [illegible]

[illegible] these men is a problem. [illegible] even when [illegible]

[illegible]

GANGRENOUS STOMATITIS WITH SPECIAL REFERENCE TO VINCENT'S GINGIVITIS

By Surgeon-Lieutenant James Cuthbert Nash,
and
Surgeon-Commander Frank Kidd Williams, R.N.

Much has been written on the subject of Vincent's gingivitis during the past two years. It is with the final effects and perhaps a summary of the evidence to date, we think, the subject may be left. We trust that the writers will not be tired of this article to these which we presented in

Incidence. The disease was in no means common in our hospitals. It occurred in two, and in several dental officers who recently joined the service, after practice, are now undergoing the initial experience of the Vincent's gingivitis in a similar degree.

Definition of Disease. A reference, however, does not differ, nor is it should be out of place in an article of this nature. We therefore propose to make brief reference to those which we think will be confined to Vincent's gingivitis.

Measures of Treatment. Direct treatment, local and general, seems to be the most important. The ultimate rate of the [illegible] and [illegible] spontaneously [illegible] under the influence of the [illegible] agents.

Local Treatment. Some [illegible] appear to be [illegible] in Vincent's [illegible].

Local Treatment. Very little [illegible] in Vincent's [illegible]. It is [illegible] use of drugs, the [illegible]. The gingivitis is confined to the [illegible] and to the [illegible] of the gingivitis [illegible] in our experience.

Systemic Treatment. Vincent's gingivitis either [illegible] or the [illegible] is far more [illegible] and [illegible] to be [illegible] and [illegible] under appropriate local treatment. The [illegible] of the [illegible].

Prognosis. Vincent's [illegible] of the [illegible] of the [illegible] and [illegible] by [illegible]. It is [illegible] that [illegible].

Conclusion. [illegible] For the present [illegible] we shall expect to [illegible] the [illegible] and [illegible] of the [illegible] of the [illegible] does not [illegible] these [illegible].

The Exploded Tooth Case. A patient [illegible] in the [illegible] with [illegible] in the [illegible]. He [illegible] about [illegible] in the case [illegible] the [illegible] of the [illegible] of the [illegible].

On [illegible] the [illegible] showed [illegible] the [illegible] gingivitis [illegible] the [illegible] from the [illegible] gingivitis [illegible].

[illegible]

[illegible]

The general condition of the patients varies within wide limits. One will complain of malaise and have a temperature of 100° or more. Another, with equally bad clinical signs, will feel well apart from the discomfort of the mouth.

Diagnosis is confirmed by the *positive smear*. (See section on bacteriology.)

History of Organism. The following brief historical outline of the work done on Vincent's disease in the early stages of the present war is important.

W. L. Muller [1], an American working in Koch's laboratory in Berlin, first saw and recorded the typical causal organisms in 1882. Rumpf [2] described the fuso-spirillary organisms in 1893, and Hugo Carl Plaut [3 and 4] wrote on the organisms in cases of angina in 1894. Vincent's original article was written in 1896 [5]. As early as 1898 Vincent and Vincent [6] established the *fusiform* in pure culture by anaerobic methods and mentioned sites for the three types of organisms in which the fuso-spirillary organisms could be found. Vincent [7] in 1905 was the first worker to produce the infection experimentally. He transferred it successfully from a fatal case of fuso-spirochaetosis of the mandible with secondary ring abscess to a rabbit's peritoneum, where gangrenous peritonitis resulted.

During the War of 1914–18 there was a great rise in the number of cases of Vincent's disease, and many articles were written. Contagion was discussed with conflicting opinions by Wingrove [8], Beatty [9], Eagleton, Mercer and Hutson [10], and others. It was shown that many apparently healthy mouths might harbour fuso-spirillary organisms. McKinstry [11] found the organisms in 98 out of 230 healthy men, or 41·3 per cent., in 1917, and the following year 4 per cent. of fuso-spirillary organisms in the throat smears of 2·43 per cent. of soldiers and in the gums of 1·3 per cent. of healthy civilians.

After the War, in 1919, Semple, Price-Jones and Digby [13] found fusiform bacilli and spirochaetes in the mouths of 95·5 and 95·3 per cent. respectively of random hospital cases. Breazeale and Greene [14], in 1940, found that 35 per cent. of ordinary individuals harboured the microbes.

During the 1914–18 War there were also conflicting views on the questions of contagion, contributory factors, the lowering of bodily resistance whereby infection by Vincent's organisms became easier. Wingrove [8], McKenzie [15], and others. Among predisposing causes to infection mentioned were pre-existing periodontal disease, oral sepsis, excessive smoking, or the presence of explosive shell fragment matter. Beatty [9], physical strain and fatigue, training underground officers and men before active service, Wingrove [8], and others. W. N. Parkes [17], a Naval Surgeon, in 1919 stressed the fact that an unhealthy mouth was not from itself a variable antecedent of Vincent's disease. Vitamins began to be discussed again, with conflicting views. C. H. Morris [18], in 1921, stated that the class of person prone to be affected lacked the food with the water soluble vitamins, while J. B. Grant [19], discussing cases in 1921, emphatically stated that "the diet does not seem to play any part in the aetiology." Dr. J. and Hecquet [20], in 1921, working on the diseases of the Roumanian troops, could not truly admit that the supervention of Vincent's organisms was due to a deficient food. D. T. Smith [21], in 1932, produced a spreading gangrenous stomatitis in guinea-pigs deficient in vitamin C, which they were inoculated with material from the gingival organisms, while only local abscesses developed in guinea-pigs of the normal strain with similar injections. T. D. Spies [22], in 1935, showed how large numbers of fuso-spirillar organisms were found in pellagrous stomatitis and how the lesions were cured in pellagra in parallel with the administration of the vitamin B complex. In 1936, Clements [23], working with rats, produced evidence of a predisposition to infections by fuso-spirillar organisms when the vitamin B complex was deficient in the diet. Since in 24 cases of fatal pellagra no fuso-spirillar infection was found, deficiency of vitamins A and B, either alone or combined with Spies, Higgins and Hubbard [25], noted that vitamin B_2 improved the Vincent's lesion which was associated with pellagra. In 1937 Smith, Parsons and Price [26], working on the Goldberger rats, found that types of fusiform organisms in deficient rats, and concluded that no similar infection was obtained when the vitamin B complex was given. In hospitals [27], Vincent's infection, in 1939, was associated with a partial deficiency of vitamins A and D. Bennett [28], in 1940, noted that Vincent's disease developed in patients who were on a high vitamin diet, supplied in the form of concentrates. J. J. King [29] has believed in the sufficiency of nicotinic

[illegible] as the predisposing cause of Vincent's disease, while H. Field (30) states that experimental and clinical evidence showed that a vehicle [illegible] any one of the strains of V. B. of C. might result in a fuso-spirillar infection. Kang attempted to inoculate his own gums with fuso-spirillary material but failed. He injured his gums before applying the infected material and there was still a negative result. He concludes that it would appear that factors other than the passage of infected material to mechanically injured tissues may in many at least be necessary before Vincent's gingivitis or stomatitis can be induced in a previously uninfected mouth.

It is interesting to note some of the rarer complications to which mouth infection by the fuso-spirillary organisms can give rise: (1) fatal gastro-enteritis (Vincent); (2) nephritis and albuminuria (Boots); (3) ulceration of the pharynx with perforation of the carotid artery (Vincent); (4) gangrene of the perineum and vulva (Spurman); (5) bronchitis, lung abscess, laryngitis with ulceration of the vocal cords, cystitis, mediastinitis, cachexia, and endocarditis, pleurisy and empyema; (6) a syphilitic ulcer of phagedenic tendency complicated by infection with Vincent's organisms (Simons); (7) gangrenous ulceration of the leg with thrombosis of the left saphenous vein (Gransberg); (8) osteomyelitis (Gilbert); (9) infection of the cervix uteri (McCormick, 31); and (10) infection of the lung cavities of bronchiectasis and pulmonary tuberculosis (Davis and Pilot, 32, and others).

The questions of contagion and the possible relationship of the disease to vitamin deficiencies claim our interest above all in view of the conflicting opinions of previous writers and in view of the overcrowded conditions which of necessity often exist at the present time.

Bacteriology and Diagnosis. The causal organisms of the disease are the spirillum of Vincent and the *bacillus fusiformis* which probably live in the state of symbiosis. The spirillum of length 10 to 20 μ is slender and undulating with four to eight unequal curves. In a dense matrix it may be looped, slightly sigmoid or even straight, singly or in bundles. It is often much thicker and longer than the treponema pallidum ever becomes.

The *B. fusiformis* is a straight or bent rod with tapering ends. It varies in size, is slowly motile and is always thickest around its mid point.

Both organisms are gram negative and the *B. fusiformis* stains more easily than the spirillum. Culture must be by anaerobic methods.

It is of note that R. Tunnicliff (33) believes that the two organisms are different stages in the life history of a single organism, but Leigh (34) and Varney (35), who has isolated four different types of *B. fusiformis* by serological and morphological studies, believe that there is no evidence that this organism bears any relationship to a true spirillum.

Some authorities believe that complex mixtures are necessary to produce lesions in man, e.g. (*a*) Vincent's spirillum, (*b*) *B. fusiformis*, (*c*) a small active motile organism regarded as the *vibrio vincenti* of Miller, and (*d*) an inadequately defined *streptococcus* (Rosebury and Foley, 36).

A case of Vincent's disease is diagnosed by having a "Positive Smear." This means that when a slice from a gum smear is stained and examined under the microscope the fuso-spirillary organisms meet the eye straight away without the necessity of making a minute count for them. Many apparently healthy mouths will produce isolated organisms on careful search, as is mentioned above.

We found that 63 per cent. of sailor patients, taken at random not suffering from Vincent's disease or other oral disease, had scanty fuso-spirillary organisms detected after careful search from gum smears.

A common laboratory stain for routine work is 1/10 carbol fuchsin; the fusiform bacilli stain well with it. We noticed, however, that the stain does not give sufficient contrast for photography, so the following simple method was used.

Gram's crystal violet stain is used for three minutes, poured off the slide and followed, with no intermediate washing, by Lugol's iodine for three minutes. The slide is then washed lightly in water and allowed to dry. Both causal organisms stain deep blue.

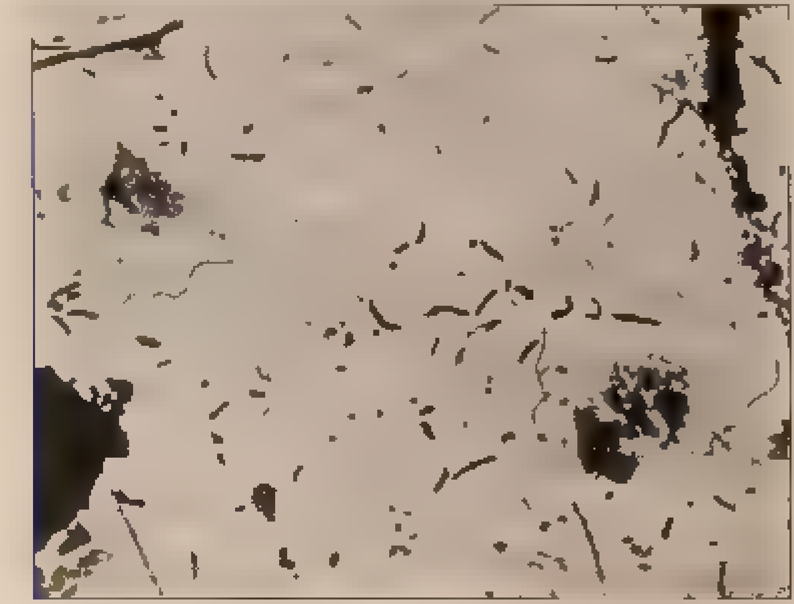
Contagion. We believe that the disease is contagious and have repeatedly seen evidence of this, especially in the crews of small ships. After deliberation we consider that the following factors, in their order of importance, are concerned in the spread of the disease among sailors:

(1) *Kissing.* Trench mouth has been called the fourth venereal disease. The method

k[illegible] kissing, when the [illegible] of one or both partners is [illegible] is present, [illegible] the disease.

[illegible]

[illegible] officers of the [illegible] cases [illegible] three wives,



F[illegible] Photograph of a positive swab.

who had not been away from the base during the Squadron's cruise, subsequently required [illegible] Vincent's [illegible] their husbands had been suffering from the disease.

[illegible] port, during the present war, when large numbers of ratings were being treated for the disease, [illegible] it was significant that the [illegible] Dental Hospital had a preponderance of [illegible] patients [illegible] at the same time.

[illegible] D. W. L. [illegible], R.N., the present Fleet Dental Officer, Home Fleet, [illegible] that there is [illegible] increase in the number of cases on return to the Fleet of [illegible] the present facilities.

It is [illegible] that [illegible] the last quarter of a century this country has [illegible] and that [illegible] during the same period has [illegible] Vincent's [illegible] assumed [illegible] proportions.

(2) [illegible] there were twenty [illegible] cases of [illegible] in the [illegible] few weeks. [illegible] officers in a separate mess. At one period the ratings [illegible] their mess, the first having been broken by enemy action or lost [illegible] at meal times and [illegible] sometimes between [illegible]. The officers became infected through their stewards, who contracted [illegible] mess, [illegible] had also been using the officers' mess traps. Similar [illegible] were [illegible] other trawlers.

Canteens [illegible] source of spread where inadequate washing of cups and glasses is the rule. [illegible] cracks in cups are danger areas where organisms can lurk.

In some [illegible] of saliva are important. One has only to note the difficulty experienced in [illegible] saliva out of a denture or an impression to realize the importance of thorough cleansing of cups and glasses. A rinse is not sufficient; there must be mechanical cleansing, t[illegible]

[illegible] *Hess.* The passage [illegible] gl[illegible] pipes on [illegible] [illegible] to another [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] R.N.V.R. [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] [illegible] [illegible] [illegible] during some [illegible] time, there has been much [illegible] this subject [illegible] the [illegible] appear [illegible] different [illegible] [illegible] vitamins [illegible] the predisposing factor [illegible] secondary infection. [illegible] investigated the possibility of [illegible] vitamin deficiency [illegible] [illegible] [illegible]

At a large East coast port Vincent's [illegible] [illegible] [illegible] quarter after the outbreak of hostilities. [illegible] corresponding increase in the number of cases of true scurvy [illegible] [illegible] [illegible] [illegible] were a predisposing [illegible] [illegible] there was no evidence [illegible] affected members of ships [illegible] [illegible] [illegible] [illegible] Hess 37 Dal[illegible] and Russe[illegible] 38 [illegible]

Urinary excretion tests [illegible] the lines described by Harris and Abbas[illegible] 39 were done on fifty-five cases of Vincent's disease [illegible] awakening [illegible] the patient emptied his bladder, discarding the urine [illegible] three hours later, 700 [illegible] [illegible] were taken by the mouth [illegible] specimen of urine [illegible] [illegible] [illegible] three and six hour intervals. [illegible] samples of urine were tested for [illegible] content.

The view formerly [illegible] was that [illegible] six hour [illegible] was [illegible] important and [illegible] that if the vitamin content were about 8 mg. per cent the subject was deficient [illegible] while if [illegible] were below 8 mg. per cent then the [illegible] was deficient in vitamin [illegible]

It is now realized that the figure 8 mg. per cent is far too high. [illegible] figure is based on a minimum [illegible] requirement [illegible] vitamin [illegible] mg. [illegible] 40 whereas it is far [illegible] lower and possibly [illegible] 8 [illegible]

The vitamin content [illegible] [illegible] after 700 mg. per cent vitamin C in one series of [illegible] cases of Vincent's disease [illegible] averaged 3.59 mg. per cent. [illegible] worse [illegible] [illegible] the population as a whole [illegible] infected [illegible] investigated.

A study of the diets of all cases showed [illegible] few exceptions [illegible] lack of vegetables. Many of the diets were monotonous but vegetables were [illegible] small craft, however [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] desired. [illegible] 41 [illegible] 1919 [illegible] [illegible] were [illegible] [illegible] [illegible] for several hours before [illegible] served. [illegible] [illegible] quarters [illegible] [illegible] cooked [illegible] after breakfast [illegible] cooked the previous day [illegible] [illegible] This [illegible] the food [illegible] destroys [illegible] [illegible] content [illegible] at all.

In the outbreak of [illegible] disease mentioned [illegible] [illegible] West Indies Station [illegible] were living [illegible] [illegible] [illegible] far from being [illegible] [illegible] [illegible] Vincent's disease.

[illegible] series [illegible] cases of the disease [illegible] treatment [illegible] [illegible] [illegible] 10 per cent [illegible] [illegible] cases [illegible] [illegible] with [illegible] [illegible] [illegible] [illegible] the first [illegible] [illegible] time. There was [illegible] [illegible] [illegible] [illegible] three methods of treatment [illegible] [illegible]

[illegible] the above observations [illegible] [illegible] vitamin [illegible] deficiency [illegible] not responsible for Vincent's disease in the R.N.V. [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible] of [illegible] cases was [illegible] on the above [illegible] deficiency [illegible] [illegible] [illegible] for [illegible] [illegible] recent articles stressing its [illegible] certain [illegible]

[illegible] [illegible] [illegible] [illegible] aches and pains, [illegible] observes [illegible]

[illegible] writers [illegible] on the pre-pellagrous state agree that [illegible] is a constant accompaniment. [illegible] series [illegible] cases of Vincent's disease seen, not one had the

[illegible]

[illegible] Regiment 44 [illegible]

[illegible]

[illegible]

[

Third day.—Prepare a wisp of cotton-wool, firmly rolled between the finger and thumb, about ⅛ inch in diameter, and of convenient length. After atomizing saturate a wisp with chromic acid solution, and swab the gingival margin, posterior to the molars. Finish by pressing the wisp gently into the vestibular space, to keep the lips and cheeks out of contact with the mouth with these wisps. When finished, return to the first vestibular space and remove the wisps in rotation.

Repeat on the second, third or fourth and fifth days. Subsequently once daily.

The condition is usually clear by several days when scaling, gingivectomy and extractions, if necessary, may be undertaken. It is not wise to attempt extraction of teeth until the acute stages of the gingivitis have subsided.

With regard to this treatment, we wish to emphasize that while the dental surgeon, with his better equipment and facilities for carrying out the dental treatment, is the ideal person to undertake it, nevertheless the ship's medical officer can by similar treatment at sea check and prevent the spread of the disease with its attendant loss of efficiency among his ship's company.

Prevention.—In conclusion we suggest the following methods of prevention of the disease in H.M. ships:

(1) Thorough and periodical dental examinations with attention to all defects noted.

(2) Oral hygiene lectures stressing the importance of (*a*) regular dental treatment, (*b*) avoidance of kissing when a foul smelling breath can be noticed, and (*c*) the unwisdom of passing around cigarettes from mouth to mouth.

(3) Adequate methods of cleansing cups and dishes and the sufficiency of eating utensils.

(4) Adequate balance of diet as exists at present.

(5) Thorough treatment of cases on the lines described above and, if feasible, their segregation, or at least the segregation of their eating and drinking utensils until cured. The antecedents should be put on the board in the Venereal cases.

(6) In the presence of an epidemic the use of potassium permanganate gargles and mouth washes and tooth brushing under supervision would do much to check the spread.

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[illegible]

[illegible] OF THE SPARK OF [illegible] IN [illegible] AND OTHER GAS [illegible] GRAVITATION

[illegible]

[illegible] in the prone position. In fractures of the humerus the slab [illegible] which is used [illegible] to form a [illegible] [illegible] When [illegible] over the acromial region and passes down the front [illegible] the elbow [illegible] up the back of the arm.

In fractures of the forearm the first slab is applied as before but does not extend up over the shoulder. The second slab is applied [illegible] the palm [illegible] running along the ulnar surface; it goes round the elbow and finishes over the dorsum of the hand at the knuckles. [illegible] length [illegible] In both instances the padded splints allow room for swelling over the triceps above and the supinator below the elbow while the antecubital fossa is uncovered by plaster. When they are being applied little attention [illegible] reduction [illegible] the correction of gross errors in alignment as the principal [illegible] complete fixation of the fracture until [illegible] treatment can be undertaken.

The bandaging of a spinal jacket with these splints requires three assistants and slinging tackle. After an adequate dose of morphia the patient is slung up, for preference by the feet, and the iliac crests [illegible] slabs [illegible]. They are applied in three pairs and the [illegible] one is [illegible] two [illegible]. The first pair is applied starting in front [illegible] over the [illegible] manubrium sterni and passing back [illegible] axilla to cross over the upper lumbar region and continue to the iliac crests. The second pair cover up the lower [illegible] of the first [illegible] a parallel but lower course [illegible] form the lower edge of the jacket just above the symphysis and the two short slabs are applied one over each flank. Excess lengths [illegible] turned [illegible] towards the spine at the posterior ends, and the jacket completed with three or four plaster bandages to keep the slabs in place. A jacket made in this way [illegible] applied [illegible] serve to get [illegible] where further treatment can be undertaken.

In large lacerations of the arms and legs and [illegible] of the hands and forearms it has been recognized for some time [illegible] some form of light splinting after the appropriate surgical treatment has been given. These plaster slabs are ideal for this purpose, providing a tailored splint moulded to the limb and dressings [illegible] the advantages of a plaster case with none of its dangers.

In [illegible] investigation recently [illegible] has been made into the [illegible] of these slabs under service conditions. As a result [illegible] those of suitable weight [illegible]. These [illegible] which shows that slabs [illegible] standing up to [illegible] sea water for a period of weeks. It also shows that if the dry slabs [illegible] a [illegible] then submerged [illegible] set under water [illegible] splint [illegible]. This takes slightly longer to set but [illegible] those made by conventional methods.

From the foregoing it will be seen that [illegible] could be used [illegible] their *slabs* [illegible] also possible [illegible] damaged [illegible] fracture [illegible] the [illegible] for [illegible] weeks after rescue.

As part of this investigation a trial of the method was made in [illegible] Service [illegible] sea water. [illegible] were used to apply these slabs [illegible] considered [illegible].

Although the [illegible] previous experience [illegible] it was found that soaking [illegible] water [illegible] adequate time for application [illegible] and comfortable splints were made. In view of this experience it is felt that these splints would be worth a trial in the first-aid treatment of the appropriate fractures occurring in ships not carrying a medical officer.

[illegible] These splints behaved [illegible] plaster of paris slab splints slaked in sea water under various conditions of immersion and exposure

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	9	2 5	[illegible] immersion 20 mins after setting after 48 hrs exposed to weather	Slow softening during immersion During first day of drying some hardening took place but thereafter softening continued and by seventh day it would have been useless as a splint
[illegible]	9	[illegible]	Lowest quarter immersed 90 mins after setting	During first 48 hours these two would have formed light but efficient splints After that progressive softening set in and by the ninth day they would have been no support
[illegible]	9	[illegible]	Lowest quarter immersed 15 mins after setting	
4	2	3	Total immersion as soon as set Taken out after seven days and exposed to weather three days after lowest quarter re-immersed	Some softening after 24 hours but still hard enough to support at end of seven days immersion During the three days' exposure some hardening took place but deterioration was rapid on re-immersion
5	[illegible]	4	Lowest quarter immersed as soon as set	A crack occurred when not quite set After 48 hours softening set in from this and by the tenth day it was useless
6	[illegible]		Total immersion when slaked—set under water taking between 5 and [illegible] mins	Hard for 24 hours deteriorated rapidly due to the lack of pressure when slaked and setting
7		3	Total immersion as soon as set After [illegible] days lowest quarter only immersed	Despite a crack right through the slab at water level only surface softening took place after two weeks total and three weeks partial immersion
8	5	2 5	In both the lowest quarter was immersed as soon as set	Apart from surface softening these splints survived six weeks partial immersion and exposure
9	15	2 5		
10	15	7	Bandages dry to a solid structure submerged after four days and left lying free under water Seven days after lowest quarter only immersed	The bandaging of the plaster slab dry to a solid object before submersion produced a splint as hard as any The durability was about 30 days

A survey of the revised scales of stores for small craft (published this year 1942) gives the following scales of splints and plaster of paris in the larger chests

[illegible]	Scale Number One	Scale Number Two	Scale Number Three
Cramer splint	2 yds	8 yds	4 yds
Gooch's splint	One roll	One roll	One roll
Arm splints	8 set	[illegible]	
Ones below knee	7	4	4
Arm	3	3	[illegible]
MacIntyre's set	[illegible]	1	1
Master of paris—			
3 in bandages	3	3	3
4 in by 4 yds	12	12	12

In many ships there may be in addition an accumulation of wooden splints of various types, a number of extra Thomas splints as directed in Admiralty Booklet B R 143 (40)

and an anticipation of the quantities of plaster bandages carried, but the last must depend on the individual medical officer. And if a medical officer unversed in the customs of the Service is appointed to a new ship, it must be assumed that his armament for dealing with fractures will be the appropriate issue as above. In all ships but in small ones particularly the amount of space occupied by and the bulk of the gear are important. If the above scale is examined the MacIntyre's set is found to be the most bulky article. It weighs 50 lb. and occupies 1.5 cubic feet. This veteran has sailed the Seven Seas Underneath for more than forty years and is now worthy of retirement either to a museum or the salvage dump.

The space so released could be occupied by eight dozen 6 in. plaster bandages which without their packing amount to 0.7 cubic feet and weigh 46 lb. This quantity would make thirty-two heavy plaster slabs 30 in. long or four spinal jackets. An increase of the scale of 4 in. bandages to ten dozen per chest would provide sufficient material to make roughly forty arm slabs of similar length and weight. It can thus be seen that the increase in the scale authorized above would permit the treatment in this way of a large number of casualties immediately after the injury, and it is suggested that there is a good case for further modification and revision of the issues detailed.

The wider use of plaster fixation as described in this article is urged for the following reasons: The technique is easily mastered; skilled assistance is not necessary; if the splints are made up ready for use the resulting case is light and durable even under severe conditions and needs little or no attention until final treatment is undertaken. The accurate fit makes it more efficient and therefore more comfortable for the patient, and for fractures of the tibia and fibula it is preferable to the Thomas splint as there is no projection beyond the foot and the patient is therefore much more transportable. Lastly, the boot need not be removed in simple fracture of the leg but can be incorporated in the splint by moulding the slabs in under the instep.

No claim is made for anything new or revolutionary. Plaster slab fixation was introduced by Professor Delbet and practised widely with success by many surgeons in the last war. The technique described here is his original method modernized and adapted so that the splints are more easily removed and can if necessary be applied by unskilled or partially trained personnel. The main indications for its use are not frequently met with during peace but it has a definite and useful place in the emergency surgery of war.

This work was [illegible] while I was [illegible] Surgeon [illegible] and I must acknowledge my thanks for help in procuring facilities from the Naval Officer in Charge of a neighbouring port. My thanks are also due to Surgeon Rear-Admiral Robert Milne for very helpful criticism during the preparation of this paper and to Surgeon Lieutenant-Commander [illegible] May for his help with the investigation.

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VACCINATION: A CRITICAL STUDY OF THE INTRADERMAL METHOD

BY LIEUTENANT-COMMANDER R. P. MCCOSH, M.B., R.A.M.C.(T.)
Senior Medical Officer, [illegible] Naval Hospital, H.M.S.

AND

SURGEON COMMANDER HUGH WILLOUGHBY, D.S.O., R.N.V.R.

It has been our good fortune recently to have an opportunity of studying the results of vaccination by the intradermal method in a considerable number of subjects. The subjects were members of H.M. Forces, and the progress was therefore under constant observation for [illegible].

Before [illegible] the first [illegible] we had [illegible] the technique employed and the [illegible] had not [illegible]. On the [illegible] R.P. has been [illegible] a recent paper on the subject [illegible] a detailed description.

The [illegible] were [illegible] the [illegible] was washed with spirit, soap and water and [illegible] one drop of [illegible], taken on the [illegible]. When the lymph was supplied in [illegible] sufficient

[illegible]

[illegible]

[illegible]

[illegible] of 0-5, 5-10, 10-15, 15-20 and 20 years and over. These are given in Table I below.

TABLE I

[illegible]	N	[illegible]	[illegible]	[illegible]
Primary	[illegible]	[illegible]	[illegible]	[illegible]
0-5 years	[illegible]	[illegible]	47	[illegible]
[illegible]	[illegible]	8	17	57
[illegible] years	59	5	15	[illegible]
15-20 years	[illegible]	80	53	[illegible]
20 and upwards	[illegible]	[illegible]		[illegible]
[illegible]	854	[illegible]	[illegible]	507

[illegible] with the previous five years 69.5 per cent. [illegible] 48.6 per cent. at the 15-20 year group [illegible] 20 years and upwards group [illegible]

It is, however, [illegible]

[illegible]

We [illegible] 854 [illegible]

[illegible]

[illegible]

[illegible] SHOCK THERAPY

By [illegible]

[illegible]

The Apparatus

[illegible] between 80 and 90 [illegible] 100 [illegible]

[illegible] saturated saline solution; they [illegible] discs of about 2 [illegible] diameter or in the form of wire gauze [illegible] pieces of both sponge and fixed [illegible]

A further [illegible] the electrodes are mounted on the end of a pair of calipers [illegible] which can easily be tied [illegible] rubber tubing [illegible] the electrodes to make [illegible]

[illegible] the temples is well smeared with [illegible] paste applied. This ensures [illegible] saline [illegible]

[illegible]

A [illegible] between six [illegible]

[illegible] resistance of the patient [illegible] treatments [illegible] necessary to carry on. When a patient [illegible] further shocks after the mental [illegible] against the possibility [illegible] patient is [illegible] in order to discover [illegible]

[illegible] of Patient

The [illegible] before treatment [illegible]

1. [illegible] before treatment
2. [illegible] before treatment
3. [illegible]
4. [illegible] pillow for the patient's head
5. [illegible] the patient's neck
6. [illegible]
7. [illegible]
8. [illegible]

A [illegible] 100 [illegible] It also appears to render the patient [illegible] the risk [illegible] spine [illegible] the case of resistive patients [illegible] is also given

[illegible]

[illegible] the area [illegible] treatment [illegible] saturated saline [illegible]

[illegible] temples [illegible] the electrodes [illegible] the current. The resistance of the [illegible] The average resistance is about 600 [illegible] between 400 and 800 [illegible] patient's [illegible]

[illegible]

[illegible] 120 [illegible] 0.2 [illegible] the electrodes [illegible]

[illegible] the [illegible] temples

[illegible]

Measurement of Reactive Power

[illegible]

1. [illegible] Wattmeter [illegible]
2. [illegible] Phase Reactor [illegible]
3. [illegible] Reactor [illegible]

[illegible]

[illegible]

[

[illegible] Electric Shock [illegible]

1. No drug [illegible] injected into the body [illegible] that the treatment is safer.
2. After [illegible] the patient is completely amnesic for the period of the [illegible] that remains [illegible] by cardiazol and to a less extent triazol).
3. [illegible] regulation [illegible]
4. [illegible] taken.
5. [illegible] few seconds [illegible] triazol where there is [illegible] delay.
6. [illegible] occurring [illegible]
7. [illegible] A [illegible] physical examination is carried out on all patients [illegible] treatment [illegible] skiagram taken of the vertebral column.

[illegible] electric shock therapy. The [illegible] ones are:

- [illegible] heart disease
- [illegible]
- [illegible] blood pressure
- [illegible] disease [illegible] vertebral [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible] history [illegible] epilepsy

Summary

[illegible] safe method of inducing [illegible] It is [illegible] on the part [illegible] in most cases. The treatment is by no means [illegible] carefully [illegible] results will be obtained.

[illegible] and it is applicable [illegible]

[illegible] are [illegible] after [illegible] the main [illegible] management.

[illegible] to almost every psychotic [illegible] expected good result, tends [illegible]

[illegible] necessitating a further [illegible]

[illegible] for permission to use statistics and [illegible] suggestion.

Clinical Notes and Cases

[illegible]

Discussion

When this secondary deposit [illegible] with the formation of [illegible] a large mass in the substance of the right triceps muscle. Investigation of the blood soon proved that this was not the case

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

WEIL'S DISEASE IN H.M. SHIPS

By Surgeon Commander A. [illegible] Nicholson, R.N.
and
Surgeon Lieutenant H. W. [illegible], R.N.V.R.

[illegible]

[illegible]

[illegible]

Clinical History of Cases

[illegible]

[illegible] 5 days. There [illegible] these. The average [illegible] count [illegible] 8,800 [illegible] 1,250 [illegible] 102 per [illegible] per week [illegible] were [illegible].

[illegible] Wa[illegible] were [illegible]

[illegible] 33.5 [illegible] whereas [illegible]

[illegible] examination [illegible] very [illegible]

Source of Infection. [illegible] Weil's disease, although not [illegible] extreme limit [illegible] under review [illegible] for [illegible] Port A [illegible] consisting of [illegible] Case 2 [illegible] source of infection in Port A [illegible] Port B [illegible] Port A was [illegible] suspected source of infection [illegible] rats on board was at [illegible]. It was [illegible] rats were present [illegible] numbers. Attempts were [illegible] the ship was lost [illegible] Case 1 was infected in Port A and Case 2 [illegible] Port B [illegible] source of infection [illegible] source is in fact considered to be infected rats on the ship.

Mode of Infection. [illegible] entrance of the *Leptospira* through skin or mucous membrane [illegible] contamination with urine from the [illegible] food or water [illegible] it is quite possible [illegible] the skin [illegible] especially [illegible] where [illegible] abrasions [illegible] exposed. Abrasions of the skin are frequent [illegible] entry of the organism [illegible] contamination of the [illegible] is not impossible.

[illegible] of the mouth [illegible] contaminated [illegible] mucous membrane [illegible] penetrating [illegible] water [illegible] because [illegible] chlorination [illegible] Royal Navy.

[illegible]. The mortality [illegible] Weil's disease has varied from [illegible] to [illegible] per cent. [illegible] outbreak [illegible] approximately [illegible] this group [illegible] case [illegible] apparent.

Had [illegible] instances [illegible] rise [illegible] the ship further cases [illegible] Case 2 [illegible] Case 1 was [illegible] considered fortunate to have escaped so lightly. The only other case of Weil's disease in the Royal Navy of which we [illegible] record was apparently an isolated one which proved fatal.[4]

Since 1936 Weil's disease has been [illegible] Workmen's Compensation Act [illegible] infection of Naval personnel occurring in the course of their duties [illegible] disease should be considered attributable [illegible] certificate was granted to cases [illegible]

The number of cases [illegible] *phosphat[illegible]* [illegible] 7 [illegible] 40 per cent according to investigators who have [illegible] interest [illegible] preventive measures [illegible] suggest Weil's disease as a possible diagnosis.

In the Royal Navy a case of Weil's disease [illegible] of the jaundice. It appears necessary that the [illegible] should be notifiable in order that appropriate immediate measures [illegible]

Summary. Two cases of Weil's disease occurring in one of H.M. ships are described, the source of infection is discussed and the potential dangers [illegible]

We are indebted to Surgeon Captain A. W. [illegible] for permission to publish this paper and to Captain [illegible] and Major R. A. V. [illegible] for [illegible] information and to Professor I. B. Ma[illegible] for his advice.

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RENAL COLIC AND HYDRAULIN

By Surgeon Commander W. V. Heaton, R.N.

In a period of nine months during which one of H.M. hospital ships was at [illegible] West African port there were [illegible] cases of renal colic admitted. All cases were fully investigated [illegible]

An analysis of these figures shows that [illegible] renal colic [illegible] stone [illegible]

The seven cases at [illegible] which constituted [illegible] interest [illegible] were [illegible] treatment [illegible] from the history that colic was recent [illegible] recognized to be due to crystalluria [illegible] the manner in which it [illegible] described.

In another twenty-nine cases were made [illegible] the trends of which were employed [illegible] severe [illegible] produced by the severe pain and so [illegible]

Purposely [illegible] water for a variable [illegible] water required [illegible] residents [illegible] Medical officer [illegible] retrograde pyelograms [illegible] more than one occasion [illegible] transfer [illegible] passing through the port were [illegible]

It therefore appears that this condition should be [illegible] knowledge of these cases are liable to [illegible] service. When the existence of this condition is realized [illegible] expected to [illegible] be found [illegible]

[illegible] emergency. For the purposes of records all the cases [illegible] have been fully investigated, with no formal negative findings other than [illegible]

[illegible] patients [illegible] morphia adequate [illegible] If [illegible] given [illegible] be necessary [illegible] average [illegible] [illegible] patient to [illegible] [illegible] the effects of the morphia [illegible] the recurrence [illegible] days.

[illegible] Vickery, RN, [illegible] forward this report.

OBSERVATIONS ON DYSPEPSIA IN THE ROYAL NAVY FROM A SERIES OF 1,003 CONSECUTIVE CASES.

By the Rear-Admiral (Medical), Royal Navy (Retired).

A series of 1,003 naval cases of dyspepsia [illegible] were admitted to a large RN Auxiliary Hospital between [illegible] 1939 and September 1944 and has been reviewed. During this period [illegible] were admitted to the hospital, so that dyspeptics accounted for 9 per cent [illegible]. The usual routine investigations were performed and in a few cases [illegible]. All the [illegible] investigations were done by the [illegible]

1. [illegible] has proved [illegible]
   1. [illegible] 67 cases [illegible] 404 cases [illegible] cases.
2. [illegible] *Primary* [illegible] cancer, 2 cases.
3. [illegible] *Functional dyspepsia*, where there was a clinical history suggestive of [illegible] but without radiological confirmation during the present illness, 148 cases.

   Such cases were subdivided into groups viz. (A) No previous perforation, haematemesis or operation, or positive X-ray, 48 cases. (B) Definite previous history of perforation, haematemesis, gastrectomy or operation, or positive X-ray, 66 cases. (C) Radiological findings suggestive of ulcer or revealing healed ulcer, 34 cases.

4. [illegible] *dyspepsia*, where there was a clinical history suggestive of gastric ulcer but without radiological confirmation during the present illness, 30 cases.

   (A) No previous perforation, haematemesis, gastrectomy, or operation, or positive X-ray, 4 cases. (B) Definite previous history of perforation, haematemesis, gastrectomy or operation, and positive X-ray, 16 cases. (C) Radiological findings suggestive of ulcer or revealing healed ulceration, 10 cases.

A logical clinical distinction between gastric and functional dyspepsia is extremely difficult. The cases in group A were considered typical of gastric dyspepsia in that there was marked vomiting, test-meal relief, pain from aggravation and considerable loss of weight. From clinical points of view the functional and gastric dyspepsia types (B and C) were [illegible] alteration and would [illegible] treated as such in [illegible] but such cases were not admitted radiologically during the present investigation, they have been excluded from the [illegible] figures in this review.

Neurotic Dyspepsia. Symptoms of dyspepsia associated with psychological [illegible] but without [illegible] or other evidence of organic disease of the gastro-intestinal tract. The great majority of this group were examined by a specialist in neuro-psychiatry, 76 cases.

a Reflex dyspepsia [illegible] gastric [illegible] duodenal [illegible] diet [illegible] constipation [illegible]

e Anthrax dyspepsia [illegible] cases

f) Hypochloric dyspepsia [illegible] case

g Food dyspepsia [illegible]

h) Dyspepsia [illegible]

i Dyspepsia of uncertain origin 221 cases

This large group is the most difficult to [illegible] Broadly speaking it is a collection of cases [illegible] of information was available in these [illegible] however that certain of them were [illegible] peptic ulcer group. In 102 cases the symptoms were present [illegible] occurred since taking up service in the Royal Navy. 82 of these were new [illegible] symptoms had come on within a few months of taking up service [illegible] definite causative factor. In 84 were [illegible] alteration of diet. [illegible] dyspepsia, 15 appeared to be sequelae of gastro-enteritis or acute tonsilitis [illegible] were attributed to sea sickness.

j Alcoholic Dyspepsia 17 cases

TABLE SHOWING DURATION OF SYMPTOMS IN DYSPEPTIC CASES

A — Since entry into War Service
B — 3 to 5 years
C — 6 to 10
D — 11 to 15
E — 16 to 20
F — 21 to 25

	No. of cases	A	B	C	D	E	F
Gastric ulcer	67	23 33 per cent	5	6	4	5	
Duodenal ulcer	404	92 22 per cent	26	84	7	4	
Gastric dyspepsia	36	6 [illegible] per cent	8		3	—	
Duodenal dyspepsia	148	28 [illegible] per cent	38	16	7	[illegible]	
Nervous dyspepsia	76	37 49 per cent	[illegible]	7			
Dyspepsia of uncertain origin	221	[illegible] 47 per cent	48	35	8	3	

SUMMARY AND CONCLUSIONS

Cases of proved peptic ulceration should be invalided from the Service unless there are very exceptional circumstances under which adequate hospital treatment is practicable.

There is no evidence that war time service in the Royal Navy has caused an increase in the incidence of dyspepsia as a whole. The expansion of the Service and the [illegible] pre war civilian population accounts for any apparent increase in incidence.

There is a relationship between war service and nervous dyspepsia and dyspepsia of uncertain origin in many cases. The change from conditions [illegible] to those unaccustomed war conditions at sea had a deleterious effect on those who possessed a [illegible] psychosomatic balance, and war time conditions at sea do not lend to the feeling of comfort which are fundamental to normal digestion. Of the 76 cases of nervous dyspepsia 60 were in the "H.C." group and 41 had a background of [illegible] In the case of dyspepsia of uncertain origin 175 out of 221 had served in Naval service at the outbreak of war and there is evidence that a complete change from the [illegible] has led to the appearance of dyspeptic symptoms in many of these [illegible] war time conditions at sea. This occurs more often [illegible] small ships where overcrowding [illegible] needs, excess of tinned and fried food and [illegible] are existing [illegible] difficult to control.

There is a long standing history of dyspepsia in the majority of cases. [illegible] 2 per cent of Duodenal ulcer cases and 20 per cent of Duodenal dyspepsia cases date their symptoms from taking up war service. 62 out of 404 cases of duodenal ulcer and 27 [illegible] 148 cases of duodenal dyspepsia had experienced symptoms for eleven to fifteen years.

56 per cent of the dyspeptic cases had chronic ulcers, that is including gastric and

[illegible]

[illegible]

A INTERESTING CASE OF SYPHILIS

[illegible]

[illegible]

1

2

[illegible]

[illegible]

[illegible] system. [illegible]

[illegible]

1. [illegible]
2. [illegible]
3. [illegible]

[illegible]

[illegible] generalized syphilis.

2. [illegible]

[illegible]

SUMMARY

[illegible] 1948. [illegible] Wassermann [illegible]

[illegible] Surgeon Lieutenant-Commander [illegible] to submit them for publication.

A METHOD OF CONTINUOUS EXTENSION OF THE LOWER LIMB

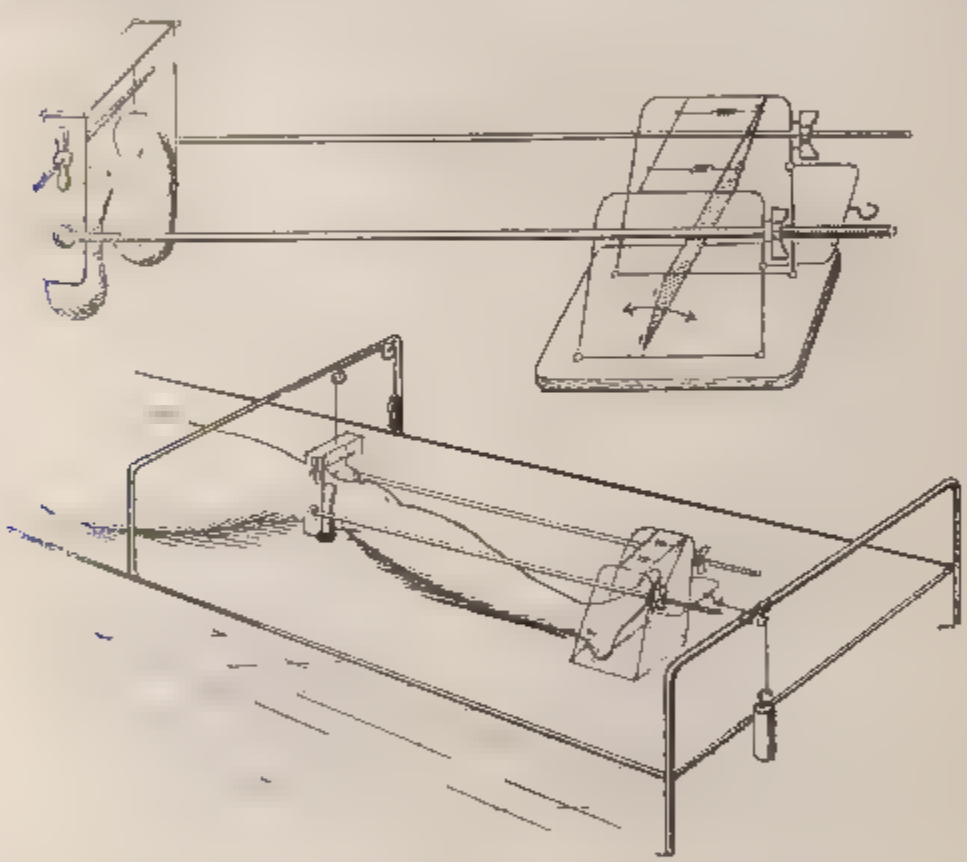
[illegible]

[illegible] extension of the thigh [illegible] methods which are in the treatment [illegible] fractured femur [illegible] necessary [illegible] be [illegible] certain [illegible]

The knee joint and its portions in the particular [illegible] complicated [illegible] outside [illegible] of [illegible] [illegible] and are to be avoided [illegible] treatment.

[illegible] traction [illegible] the knee are therefore bad and [illegible] have been entirely given up [illegible] position of the knee and [illegible] the knee joint.

[illegible] direct traction of the thigh. A certain number of attempts have been made.



Traction [illegible] means of [illegible] strips [illegible] with circular strips around the lower part of the thigh. But these strips [illegible] by pulling on the parts [illegible] there [illegible] area [illegible]

A [illegible] used applied [illegible] the thigh. But these [illegible] lengthways [illegible] irritation of the skin.

[illegible] considered the best and the surest that is to exercise [illegible] the lower part of the femur by means of a [illegible] or metal pin going through [illegible] the skin and the femur for in treating fractures [illegible] skin [illegible] against infection [illegible] metallic foreign [illegible] to the [illegible]

Our apparatus attempts [illegible] about the [illegible] Steinmann's skewer without [illegible] the skin. The point of purchase we use is the expansion brought about by the

[illegible]

The apparatus.—This is composed of two [illegible] parts [illegible] lower end of the femur above the condyles where the fracture begins [illegible] what to do is the foot in the correct position. The two parts [illegible] can be adjusted.

The bracket.—This is formed by a piece of [illegible] separation of the [illegible] with a winged nut. At the end of the branches the bracket is [illegible] which encloses the leg. [illegible] 2 [illegible] with [illegible]

The stirrup.—This part [illegible] metal rods holds the position, the foot [illegible] frame of iron wire with a large hole [illegible] position by a spring.

The bed being horizontal [illegible] stirrup [illegible] of a weight and pulley. Moreover a reverse pulley exercises [illegible] opposite direction [illegible] weights [illegible] on the desired position.

[illegible] rest against the [illegible] It is partly [illegible] space where the vessel [illegible]

Connection between the [illegible] and the stirrup.—[illegible] extremities of the leg.

It is brought about [illegible] situated above the instep of the foot [illegible] bracket is here a piece [illegible] stirrup. [illegible] of the foot and [illegible] of the bracket [illegible]

[illegible] be [illegible] and [illegible] parts of the apparatus be. It is [illegible] assert [illegible] be [illegible] definite.

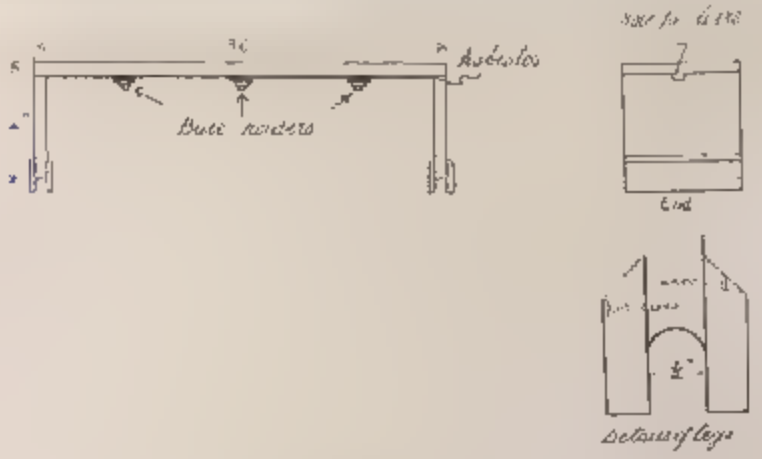
IMPROVISED MEDICAL APPARATUS FOR USE IN AIR DESTROYERS

By [illegible]

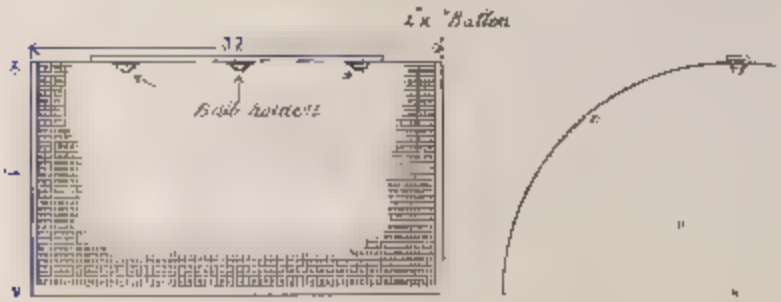
In this article a few improvised pieces [illegible] other [illegible] have [illegible] materials.

(1) *Portable Hot Bed Tent.*—The patterns [illegible] designed as [illegible] of the structure [illegible] the central [illegible] were fitted with [illegible] for steam pipes was fixed to the uprights [illegible] prevent warping of the wood [illegible] heat [illegible] This tent serve two other purposes [illegible] table and the lights could be [illegible] mentioned the blankets [illegible] outside the [illegible]

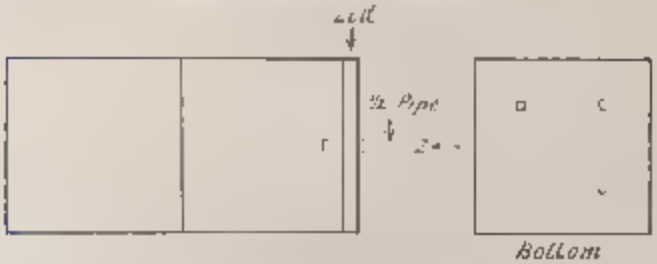
The second pattern of article was made [illegible] for protecting notice boards, &c. The [illegible] to the required size. The ends of the [illegible] pieces


Asbestos
Base holders
End
Bottom of legs

Type I


Base holders

Type I


Bottom

[illegible]

3. *Emergency Sterilization.* [illegible] Alternative arrangement should be made. [illegible] used. Six of these were [illegible] Hospital Ship, where they were sterilized and sealed with adhesive tape. [illegible] numbered in [illegible] the cots in the [illegible] and were stored in the two Distributing Stations and Little Sick Bay.

Contents of tins:—

(1) Transfusion Outfit, as issued:
- Small towel
- Gauze swabs

(2) Improvised Transfusion Outfit:
- Small towel
- Gauze swabs

(3) Two small towels:
- Roll of gauze
- Six [illegible] pads
- Two 2 [illegible] bandages
- Twelve gauze swabs

(4) As for (6):
(Note: Twenty gauze swabs were [illegible] with [illegible] and were [illegible] work was [illegible].)

(5) Tourniquet and Sterile Dressings. These were [illegible] and were similar to the W.D. pattern:
- Roll of gauze
- Roll of gauze
- Roll of wool

(6) Twenty-four Gamgee pads:
- Roll of gauze
- Roll of gauze
- Roll of wool

[illegible] (3) and (4) were [illegible] work [illegible] of First Aid work [illegible].

HEAD SHELTERS

By Surgeon [illegible]

On one occasion [illegible] were worn out [illegible] were [illegible] but it was not [illegible] it was [illegible] treating [illegible] head. It was [illegible]

[illegible]

Reviews.

[illegible]

[illegible]

[illegible]

[illegible] bacteriological knowledge.

L.

[illegible]

News of the Service.

OBITUARY

[illegible]

[illegible]

[illegible]

[illegible]

HONOURS.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] De patche

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

RETIREMENTS, R.N

[illegible]

PROMOTIONS, R.N

[illegible]

TRANSFERS TO THE PERMANENT LIST

[illegible]

ROYAL NAVAL VOLUNTEER RESERVE.

[illegible]

Notice

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Journal

of the

Royal Naval Medical Service.

Articles.

POST ARSENICAL AURICULO-VENTRICULAR DERMATITIS — A SURVEY OF RECORDS FROM SEVERAL HOSPITALS, 1929–1944

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	24 [illegible]	[illegible]
[illegible]	19	44	[illegible]
[illegible]	18	8	[illegible]
[illegible]	[illegible]	8	80
[illegible]	27	25	42.5

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1	[illegible]	100
[illegible]	[illegible]	[illegible]	100
[illegible]	[illegible]	[illegible]	100
[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	145	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	73	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Stage of epidemic	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	5	[illegible]	[illegible]	[illegible]	[illegible]
cases	[illegible]	4			[illegible]	100
[illegible]	[illegible]	20	5	11	[illegible]	[illegible]
cases	[illegible]	58	[illegible]	1	[illegible]	[illegible]
Late [illegible]	[illegible]	[illegible]	[illegible]	11	5	[illegible]
cases	[illegible]	2	[illegible]	[illegible]	1	88.7

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 1929–1942

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1929	[illegible]	54	534	22	[illegible]
[illegible]	[illegible]	52	[illegible]	264	54
[illegible]	588	[illegible]	489	209	98
1932	580	[illegible]	[illegible]	273	147
1933	607	48	553	269	84
1934	544	43	498	195	[illegible]
1935	498		440	17	[illegible]
[illegible]	45	48	408	14[illegible]	[illegible]
1937	[illegible]	[illegible]	440	159	91
[illegible]	[illegible]	15	405	[illegible]	44
1939	[illegible]	[illegible]	443	[illegible]	93
1940	443	17	[illegible]	[illegible]	75
1941	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		5 84	[illegible]	[illegible]

TABLE 3. [illegible] *Typhoid* [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1929	399	83	[illegible]	98	2	4	1		4		103
1930	635	5	10	155	5	5	1		4		166
1931	864	98		[illegible]	4	6	1		5		[illegible]
1932	337	90	24	224	1	4					444
1933	684	78	6	78	2	[illegible]	6		4		284
1934	943	11	9	78	5	11	[illegible]		5		413
1935	257	26	[illegible]	[illegible]	1	16			6		[illegible]
1936	78	6	5	18	[illegible]	[illegible]	4	4	[illegible]		285
1937	4	2		8		44	4	4	262		391
1938	5	[illegible]	4	8		[illegible]	[illegible]	1	13		344
1939	8	6				5	4		18		84
1940		[illegible]				5	10		15		4
1941	3					3	5				116
[illegible]	[illegible]	[illegible]	60	[illegible]	22	[illegible]	[illegible]	14	58		3

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] PATIENTS [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] from the bottom of the list of drugs [illegible] 43.7 days [illegible]

[illegible]

[illegible]

[illegible]

[illegible] 1926-1940. [illegible]

[illegible]

1926	4	79	[illegible]	[illegible]	[illegible]	4,150	[illegible]	[illegible]
1927	8	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1928	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
1929	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1930	5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1931	5	[illegible]	[illegible]	[illegible]	111	[illegible]	[illegible]	[illegible]
1932	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	85	[illegible]
1933	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1934	[illegible]	[illegible]	[illegible]	[illegible]	110	[illegible]	[illegible]	[illegible]
1935	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1936	[illegible]			[illegible]		[illegible]	[illegible]	[illegible]
1937	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1938	4	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
1939	[illegible]	[illegible]			[illegible]	[illegible]	[illegible]	[illegible]
1940*	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

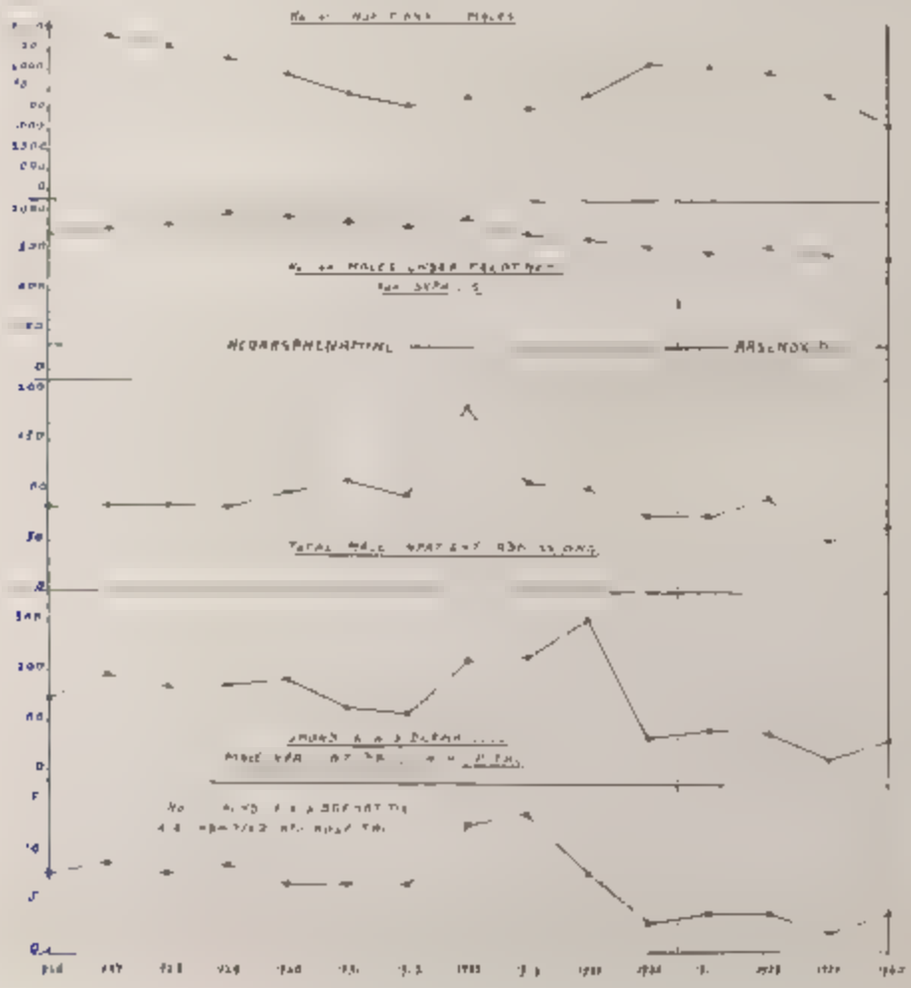
[illegible] 1926 [illegible] 1932 [illegible] 1933 [illegible] 1934 [illegible] 1935 [illegible]

[illegible] 1936 [illegible] degree.

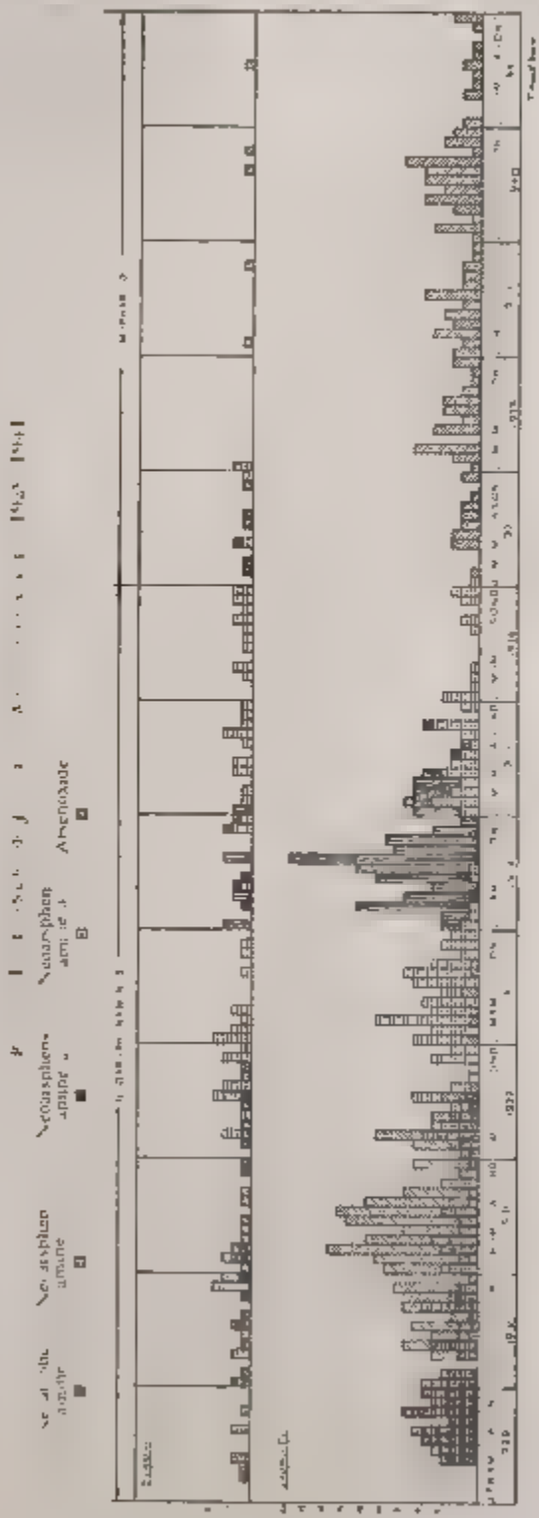
[illegible]

[illegible]

[illegible]


NEOSALVARSAN
ARSENOXIDE

[illegible] shows [illegible] 1929 [illegible] and [illegible] following [illegible] absence [illegible] from [illegible] [illegible] Trains 2, 3, [illegible] [illegible]



[illegible]

[illegible]

[illegible]

[illegible]

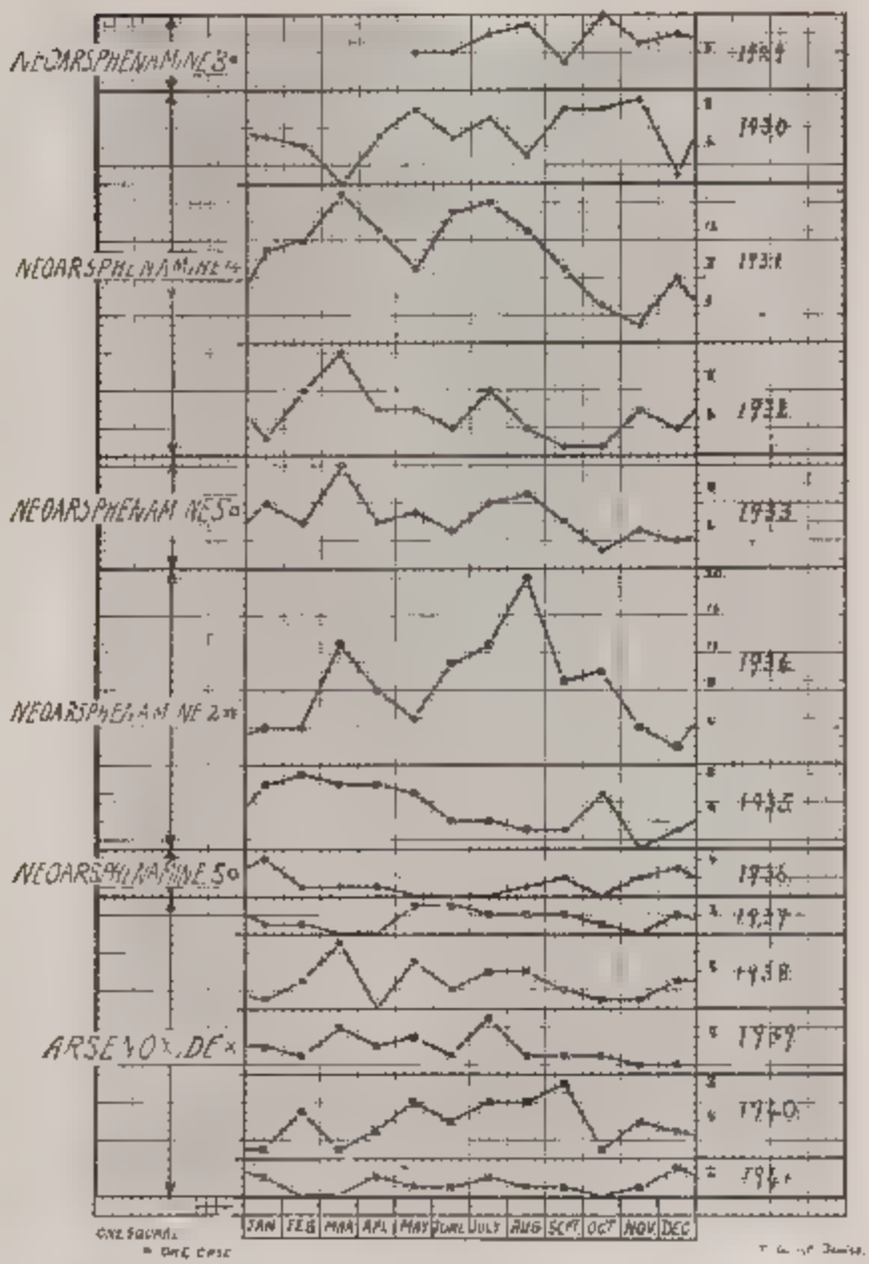
[illegible]

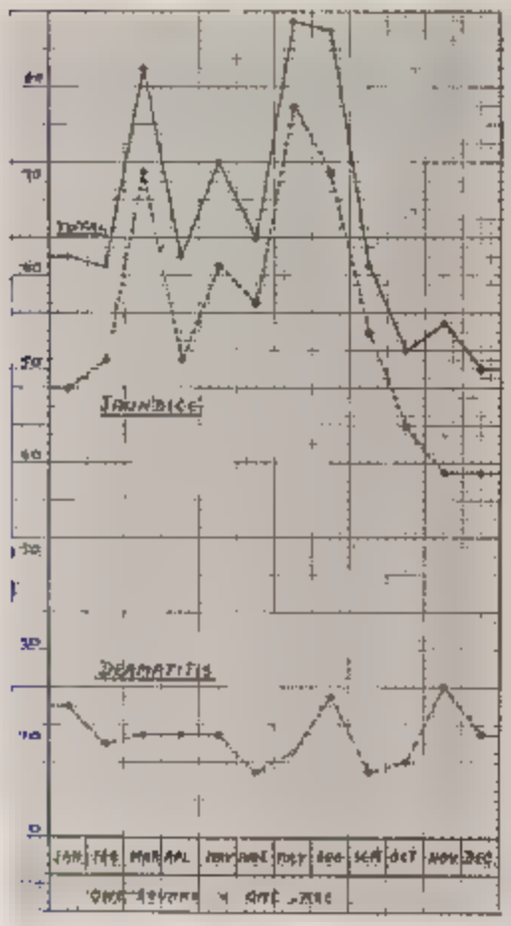
[illegible]

[illegible]

[illegible]

[illegible]


NEOARSPHENAMINE 3
1930
NEOARSPHENAMINE 4
1931
1932
NEOARSPHENAMINE 5
1933
1934
NEOARSPHENAMINE 2
1935
NEOARSPHENAMINE 5
1936
1937
1938
ARSENOXIDE
1939
1940
1941
JAN FEB MAR APL MAY JUNE JULY AUG SEPT OCT NOV DEC
ONE SQUARE = ONE CASE


JAUNDICE
DERMATITIS
JAN
FEB
MAR
APR
OCT
NOV
DEC

[illegible]

[illegible]

[illegible]

ARSENOXIDE (MAPHARSIDE) VERSUS NEOARSPHENAMINE (N.A.B.)

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Recent [illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

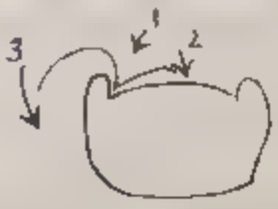
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

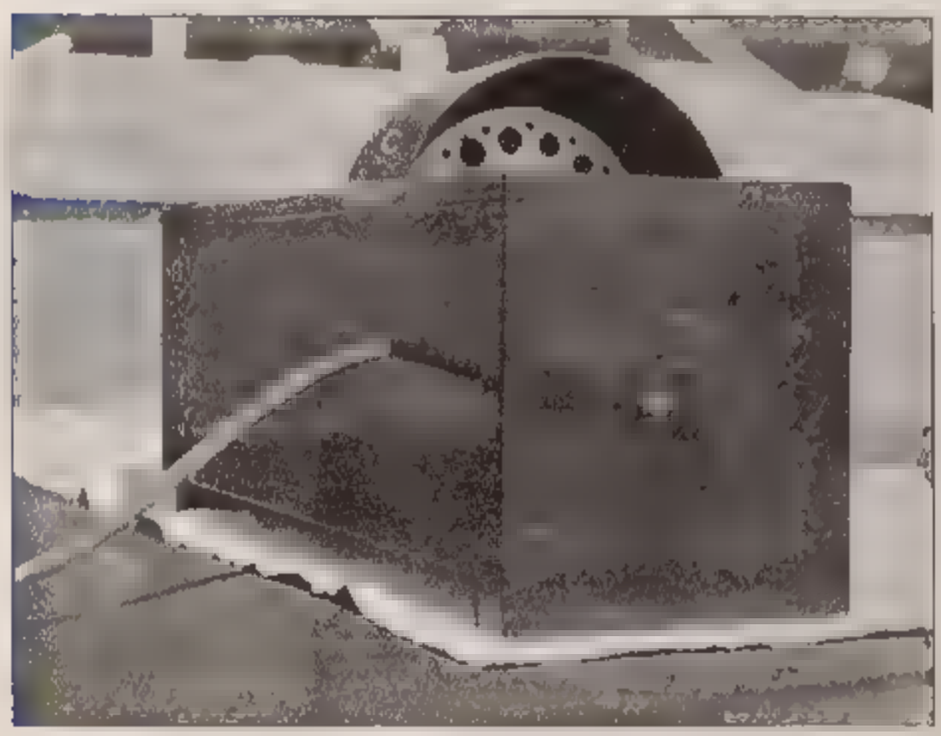

3
1
2

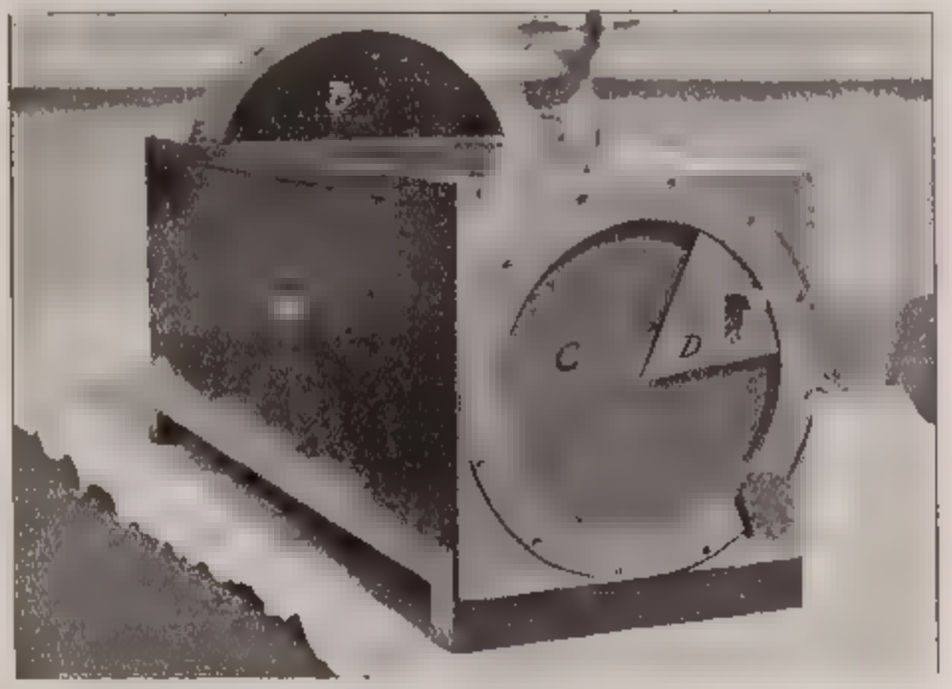
[illegible]

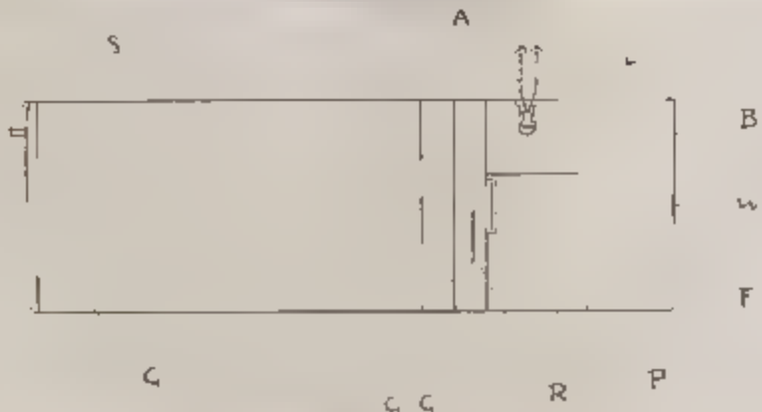
[illegible]

[illegible]

[illegible]



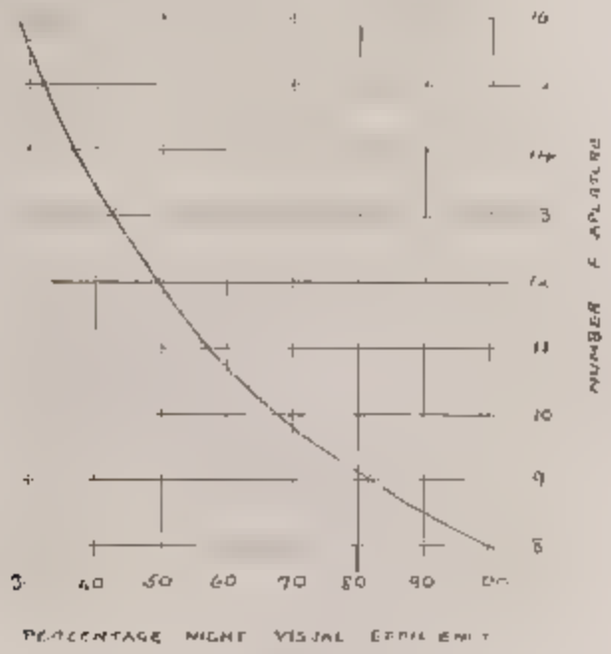

C
D


A
S
B
W
F
G
G G
R
P

[illegible]

[illegible]

[illegible]


NUMBER OF APPLICATIONS
PERCENTAGE NIGHT VISUAL EFFICIENCY
40
50
60
70
80
90

[illegible]

[illegible]

[illegible]

[illegible] 98 per cent.

[illegible]

[illegible] 96 per cent. [illegible] 88 per cent.

[illegible]

[illegible] 80 per cent. [illegible]

[illegible] 77 per cent.

[illegible]

[illegible]

[illegible] 68 per cent [illegible] 98 per cent [illegible]

[illegible]

[illegible] 68 per cent [illegible] 82 per cent [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

PROGRAM ANALYSIS FOR SYNTHETIC LARGE H.M. SHIPS UNDER RAW CONDITIONS

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 50 [illegible]

[illegible]

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]
7. [illegible]
8. [illegible]

[illegible]

[illegible]

[illegible]

1. Wild Reactors

[illegible]	1	0	50	0	0	5	
	2	250		50	0	8	50
	3	250	25	50	0	8	45
	4			0		4	0
	5	25	125			14	8
	6	75	50	50		11	2
	7	50		50		4	14
	8	250		0		5	0
	9	50	0	50	0	4	0
	10	150	50	50	0	12	11
	11	250	0	50	0	15	11
	12	0	0	50		0	0
	13	50	0	50		8	50
[illegible]	14	0		50		8	[illegible]
[illegible]	15	250	0	50	50	8	[illegible]
[illegible]	16	0	0	50		78	[illegible]
	17	0	0	50	0		[illegible]
	18	250	0	50		15	[illegible]
	19	50	0	5		11	[illegible]
	20	0	0	50		9	[illegible]
	21	0	0	50		9	[illegible]
	22	0	0	0	0		[illegible]
	23	0	0	50		9	[illegible]
	24	50	0	50		8	[illegible]
	25	0	0	50		9	[illegible]
	26	0	0	50		9	[illegible]
	27	125	0	50		11	[illegible]
	28	0				8	[illegible]
[illegible]	29	0			0	0	
[illegible]	30	25		50		9	
[illegible]	31	125	0	50		0	
	32	0	0			11	
	33	0			0	9	
	34	50		0	0	7	
	35		0	0	0	7	
	36	0	0	50	0	0	
	37			0	0	4	
	38	50	0	0		7	
	39	0	0	0		7	
	40	0	0	50		9	
	41	0	0	50		[illegible]	
	42	50	0	50		9	
	43			50	50	9	
	44			0		13	
	45	50		50	0	11	
	46	0	0	0	0	11	
	47	0	0	0	0	0	
	48	0		50	0	5	
	49	50	0	50	0	7	
	50	0	0	50	50		
	51	0	0	0	0		
[illegible]	52	0	0	0	0		
	53	0	0				
	54	0	0				
	55	0					
	56				0		
	57			0	0		
	58	0	0	50	0		
	59	0	0	0	0		

Note [illegible] were [illegible] 50 [illegible] 5 [illegible] [illegible] 50 [illegible] [illegible] 50 [illegible] [illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

DR. BAIKIE, M.D., SURGEON R.N., NATURALIST, TRAVELLER, PHILOLOGIST

[illegible]

William [illegible] Baikie, naturalist, traveller [illegible] Surgeon R.N. He was born in Kirkwall, Orkney, on August 27, 1825, and was educated at the [illegible] Grammar School. [illegible] adventure and it was [illegible] respect. Afterwards he studied medicine [illegible]

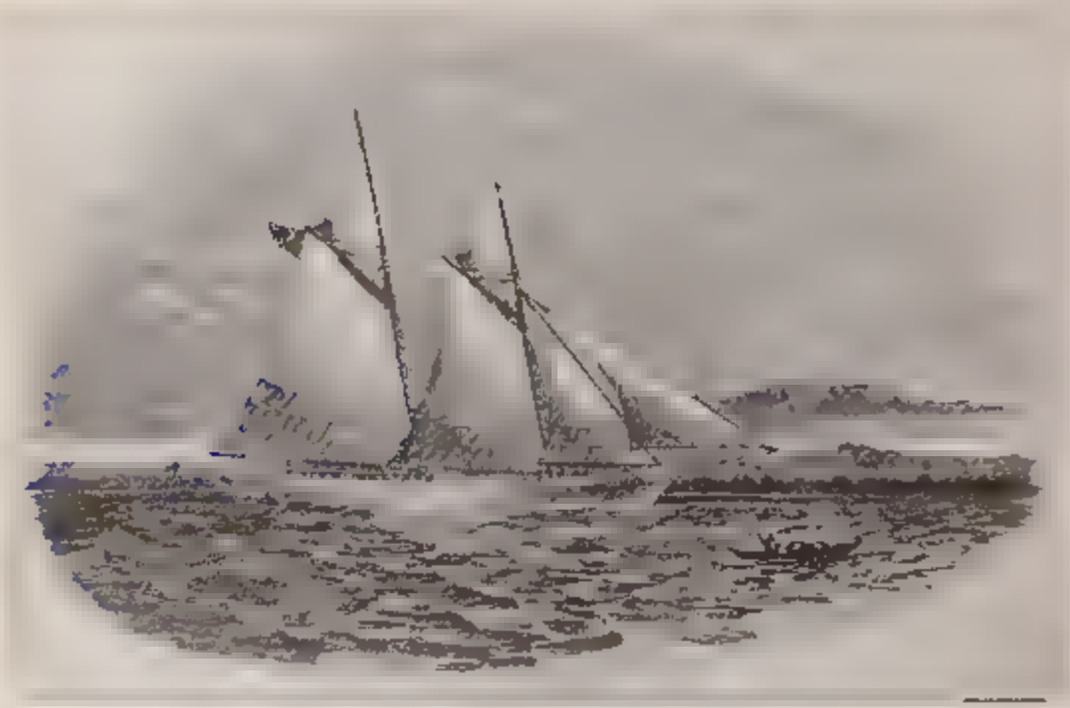
[illegible] Baikie [illegible]

[illegible]

He entered the Royal Navy in 1848 as Assistant Surgeon [illegible] H.M. ships [illegible] promoted [illegible] Assistant Surgeon [illegible] In 1854 on the [illegible] of Sir Roderick Murchison [illegible] the *Pleiad*, steamer of 260 tons, 100 ft. long, 7 [illegible] 60 h.p. [illegible] Niger [illegible] the Niger and Binue in 1854 [illegible] 1856.

After a second expedition [illegible] Niger [illegible] Baikie [illegible] the Niger [illegible] for seven years on the Niger.

In 1860 the [illegible] arrangements with the [illegible]



[illegible]

[illegible]

[illegible]

[illegible]

Clinical Notes and Cases

ARTERIAL [illegible]

DOUBLE CASE OF MALARIA

[illegible]

TORSION OF THE SPERMATIC CORD

[illegible]

[illegible] testicle.

[illegible]

[illegible]

[illegible]

[illegible] signs.

[illegible] the scrotum. [illegible]

Differential diagnosis. [illegible]

[illegible] tenderness of the [illegible]

[illegible]

Recently several cases of [illegible] of the scrotum [illegible] have been reported [illegible]

Treatment. [illegible] diagnosis.

[illegible] states that six hours of torsion [illegible] especially where there is a [illegible] development [illegible] ligated.

SUMMARY

1. [illegible]

2. The [illegible] changes [illegible] reviewed.

3. Differences [illegible]

4. The differential [illegible]

[illegible]

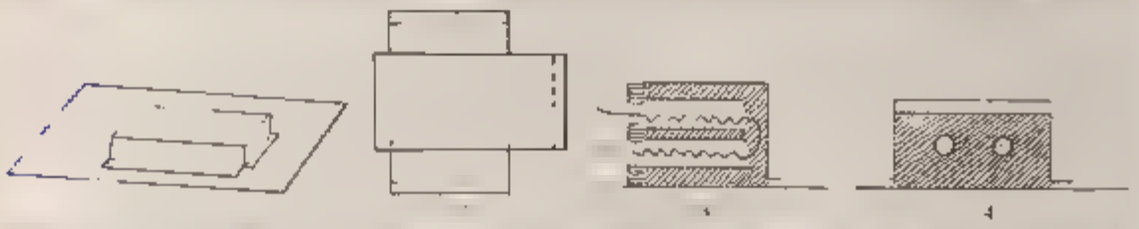
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]



Reviews.

[illegible]

[illegible]

[illegible]

News of the Service.

OBITUARY

[illegible] following medical officers have been reported as prisoners of war:

Surgeon Commander H. [illegible], R.N. Surgeon Lieutenant [illegible], R.N.V.R. Surgeon Lieutenant [illegible], R.N.V.R. Surgeon Lieutenant J. [illegible], R.N.V.R. Surgeon Lieutenant [illegible], R.N.V.R. Surgeon Lieutenant [illegible], R.N.V.R. Surgeon Commander [illegible], R.N.V.R.

HONOURS

[illegible] 1944

Surgeon Lieutenant M. [illegible], R.N.V.R.

[illegible]

Captain [illegible] Watson, R.N. (deceased), V.C., C.S.I., R.C.

[illegible]

Surgeon Commander J. [illegible], R.N.
Surgeon Commander [illegible], R.N.
Surgeon Lieutenant Commander B. H. [illegible], R.N.V.R.
Surgeon Lieutenant [illegible] Murray, R.N.
Surgeon Lieutenant [illegible], R.N.V.R.

[illegible]

Surgeon Lieutenant [illegible], R.N.V.R.
Surgeon Lieutenant [illegible], R.N.V.R.

[illegible]

Surgeon Commander [illegible] Law, R.N.V.R.
Surgeon Lieutenant Commander [illegible], R.N.
Surgeon Lieutenant [illegible], R.N.V.R.
Surgeon Lieutenant J. B. Macfarlane, R.N.V.R. (posthumous)
Surgeon Lieutenant [illegible], R.N.V.R.
Surgeon Lieutenant [illegible], R.N.V.R.
Surgeon Lieutenant [illegible] Varsen, R.N.V.R.

[illegible] Dissolution

Surgeon Commander [illegible] Mason
Surgeon Commander [illegible]

GILBERT BLANE MEDAL, 1943 AWARD

The above medal has been awarded to Surgeon Lieutenant Commander [illegible], M.B., M.R.C.S., R.N.

MEDICAL INTELLIGENCE

Protection of Personnel of Typhus Teams

[illegible] Medical Officer [illegible] 1942 [illegible] October 1944 [illegible] Ministry [illegible] 2 [illegible]

As [illegible] 1944 [illegible] medical [illegible] the sick.

MEMORIAL TO THE LATE CAPT. A. E. HURFORD, M.B.E., R.M.

Captain [illegible] Royal Marines, [illegible] Secretary [illegible] R.N. [illegible] from 1918 [illegible] 1943 [illegible] very many Medical Officers and others.

A fund [illegible] medical [illegible]

It is hoped that [illegible] be made for [illegible] after the war in the [illegible] be handed [illegible]

The [illegible] be administered by the Medical Officer-in-Charge [illegible] in office.

Subscriptions should be addressed to the Medical Officer-in-Charge, R.N. Hospital, Plymouth.

NAVAL MEDICAL COMPASSIONATE FUND

Account of Receipts and Payments for the Year Ended December 3 , 1942

	£ s d	£ s d
Balance at Bank on January 1 1942		
Current Account	154 14 6	
Deposit Account	106 7 0	
		261 1 6
Dividends on 2½ Consolidated Stock	365 0 0	
Interest on 3½ Conversion Stock	66 10 0	
Interest on 4% Consolidated Stock	44 0 4	
Interest on 3½ War Stock	22 15 0	
		387 5 4
Donations		8 8 0
Subscriptions		16 6 0
Grant from Income Tax Repayment Scheme		100 0 0
Interest on Deposit Account		10 6
		£973 11 4

	£ s d	£ s d
Awards to Widows and Orphans		556 0 0
Secretary's Allowance		5 5 0
Auditor's Fee		1 1 0
Balance at Bank on December 31 1942		
Current Account	363 12 10	
Deposit Account	106 17 6	
		410 10 4
		£973 11 4

I certify that I have examined the above Receipts and Payments Account and find it to be correct in accordance with the books and records of the Fund and that all my requirements as Auditor have been met.

A certificate of the Stocks held by the Bank of England to the names of the Trustees on December 31 1942 as shewn hereon is attached.

The Bank Balance £410 10s 4d includes the sum of £21 which is held on account of the donations and Subscriptions to the amount of £ 17 were outstanding at December 31 1942 as follows

1937	£2 2 0
1938	6 6 0
1939	14 14 0
1940	18 18 0
1941	24 9 0
1942	36 15 0
	£101 17 0

One subscription of 1s was paid in advance

Sgd. Wm. C. McNICOL C.A.

January 1943 *Auditor.*

Analysis of the above Cash Balance Stock to the following accounts were standing at the close of the Accounts at the Bank of England in the name of the Trustees viz.

*	10,600	2½% Consolidated Stock
	900	3½% Conversion Stock
†	825	4% Consolidated Stock
	£650	3½% War Stock

* Original Fund under clause 5 of the Trust Deed dated 28 1915

† Investments out of accumulated interest and subscriptions

Sgd. C. A. GRIFFITHS.

Surgeon Rear-Admiral,

Honorary Treasurer.

January 1943

JOURNAL OF THE ROYAL NAVAL MEDICAL SERVICE

Balance Sheet, 1942

Assets	£	s.	d.	Liabilities	£	s.	d.
Balance in Bank 31/7/42	76	3	6	Nil			
£90 3% Funding Stock	90	[illegible]	[illegible]	Balance [illegible]	776	3	6
£600 4½% War Loan	600	[illegible]	[illegible]				
	776	3	6		776	3	6

Presented at the Annual Meeting of the Management Committee on Leave May 18, 1943

Sgd. [illegible] Surgeon Rear-Admiral.

Sgd. [illegible] Surgeon Rear-Admiral (Retired).

Notice.

The Editors invite Medical Officers to send in Original Papers on professional subjects, travel, personal experiences, &c. Items of news and matters of interest to the Naval Medical Service will be welcomed from ships and establishments on home and foreign stations.

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Notices of Births, Marriages and Deaths are inserted free of charge to subscribers.

All Communications should reach the Editors on or before the First of the Month preceding the date of issue. Unless clearly written, they should be typed in order to avoid mistakes, and they should be addressed to the Editors, JOURNAL OF THE ROYAL NAVAL MEDICAL SERVICE, Royal Naval Hospital, Barrow Gurney, near Bristol, and not to Royal Naval Hospital, Haslar, Gosport.

THE JOURNAL OF THE ROYAL NAVAL MEDICAL SERVICE is published quarterly, four numbers comprising one volume.

The Subscription is 20s. per annum (postage included), payable on January 1st of each year, but should a subscriber wish to commence at another quarter he may do so by payment at the rate of 5s. per copy. All subscriptions are payable in advance. Single copies can be obtained at 6s. per copy. Cheques or Postal Orders for Subscriptions should be crossed "Lloyds Bank, Ltd.," and be made payable to the Manager, JOURNAL OF THE ROYAL NAVAL MEDICAL SERVICE, Royal Naval Hospital, Barrow Gurney, near Bristol, to whom all communications relating to subscriptions, &c., should be addressed.

The payment of subscriptions by Banker's Order is recommended as it relieves the Subscriber of the necessity of forwarding a cheque each year and simplifies the keeping of accounts.

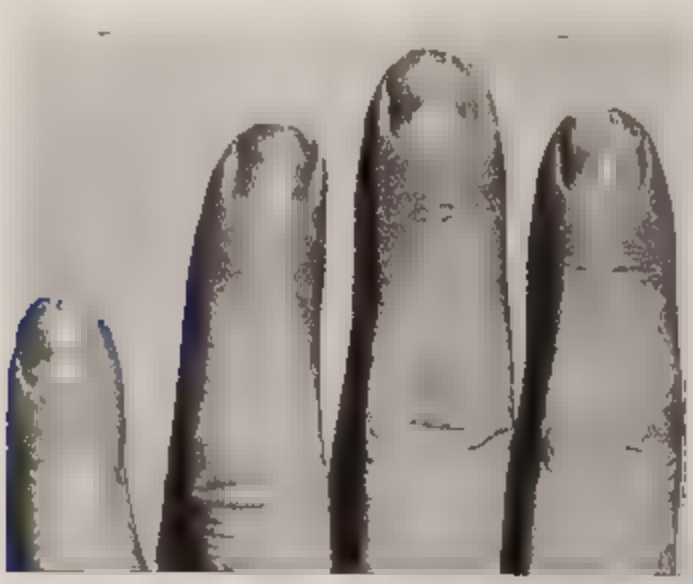
VOLUME XXIX OCTOBER 1943 No 4

Journal

of the

Royal Naval Medical Service.

Articles.



[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

SOME DISEASES SIMULATING ACUTE [illegible]

[illegible]

THE CHOICE OF ANÆSTHESIA FOR ABDOMINAL SURGERY [illegible]

[illegible]

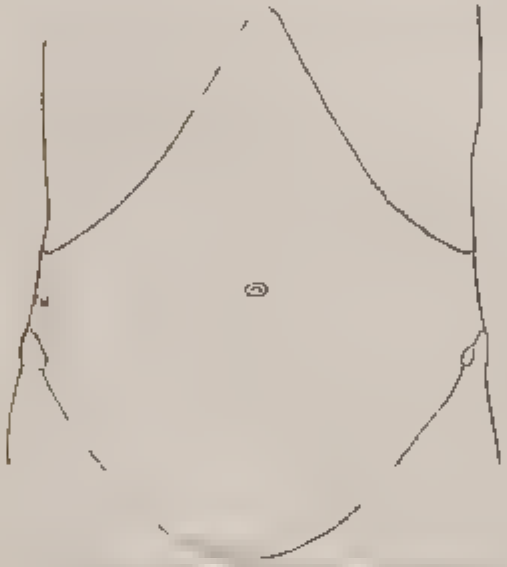
will be found that the longer the operation continues the [illegible] necessary to maintain anaesthesia at the required level. This [illegible] is well shown in the following table.

[illegible]	[illegible]	[illegible]
A. [illegible] Appendicectomy	87	[illegible]
[illegible]	63	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	56	[illegible]
[illegible]	56	[illegible]
[illegible]	35	[illegible]
[illegible]	50	[illegible]
[illegible]	32	[illegible]

A [illegible] patients were remarkable [illegible] with the [illegible] age 82 [illegible] had an [illegible] of the transverse colon [illegible] and pancreas [illegible] after operation.

Patients [illegible] sleep. [illegible] two of these cases was [illegible] post-operatively [illegible] necessary.

[illegible] the Nuffield Department of Anaesthetics [illegible]



x [illegible] Appendicectomy.

[illegible]

X [illegible]

[illegible]

[illegible]

[illegible]

Part I.

[illegible]

zeal [illegible] detecting [illegible] than their colleagues in Malta.

[illegible] in Malta [illegible] between [illegible] 5 and 10 years [illegible] number [illegible] trachoma cases [illegible]

When it is considered that [illegible] persons [illegible] would [illegible] per cent. [illegible] of Gozo or Malta [illegible]

[illegible] that the [illegible] the figures [illegible] the average [illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	10–15	[illegible]	[illegible]	25–45	[illegible]	65 [illegible]	[illegible]
1936	Malta	[illegible]	26	5	—	7	2	8	[illegible]	83
	Gozo	4	[illegible]	[illegible]	8		[illegible]			[illegible]
1937	Malta	[illegible]	[illegible]		3	7	14	[illegible]		[illegible]
	Gozo	[illegible]	[illegible]	4	8	4	1			[illegible]
1938	Malta	[illegible]	[illegible]	3	[illegible]	[illegible]	4	4		[illegible]
	Gozo		188	[illegible]		[illegible]	[illegible]	4	4	[illegible]
Average 1936–38	Malta	3	26	[illegible]	[illegible]	7	[illegible]	5	1	[illegible]
	[illegible]	4	[illegible]	[illegible]	5	5	[illegible]			[illegible]

[illegible] Malta [illegible]

[illegible]

[illegible]

[illegible]

[illegible] parent [illegible]

[illegible]

[illegible] Maltese [illegible]

[illegible] the question.

5

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

HYPOVITAMINOSIS C AND ULCERATIVE GINGIVITIS

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

EXTERNAL OTITIS

[illegible]


NUMBER OF CASES
7
6
5
4
3
2
1
N'L
JUNE JULY. AUGUST. SEP. OCT. NOV. DEC.
MONTHS OF THE YEAR

[illegible]

[illegible]

[illegible]

[illegible]

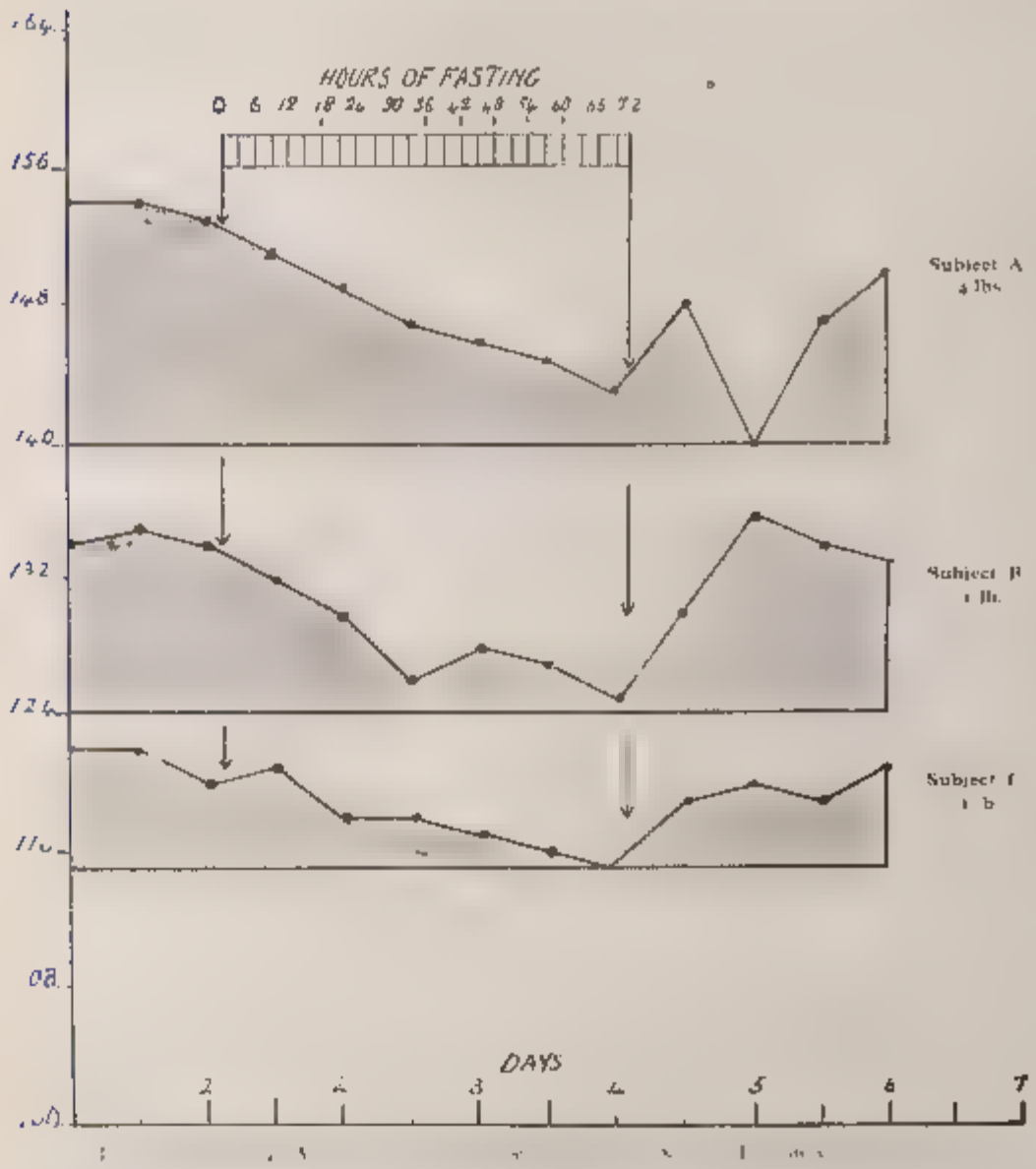
[illegible]

The temperature [illegible] atmosphere [illegible] a tomat[illegible] [illegible] meter. [illegible] Meteorological [illegible] Meteorological [illegible] weather [illegible] [illegible] read write [illegible] allowed [illegible]

The temperature [illegible] atmosphere [illegible] a tomat[illegible] [illegible] meter. [illegible] Meteorological [illegible] Meteorological [illegible] weather [illegible] [illegible] read write [illegible] allowed [illegible]

Pemmican	544	[illegible]	4.8	[illegible]	4	0		[illegible]	[illegible]
Bacon	[illegible]	[illegible]	11.5	[illegible]	0	118	[illegible]	[illegible]	[illegible]
[illegible]	55	65	4.8	2.7	[illegible]	8	[illegible]		[illegible]
[illegible]	510	48	5.2	[illegible]	[illegible]	[illegible]	110	[illegible]	7.7
						448	[illegible]	18.0	[illegible]

We are indebted [illegible] Spragg [illegible] Mr. A. [illegible]


HOURS OF FASTING
0 6 12 18 24 30 36 42 48 54 60 66 72
156
148
140
132
124
116
108
100
Subject A
Subject B
Subject C
DAYS
2
3
4
5
6
7

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Subject	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	988	54	465	400
[illegible]	227	280	550	450
[illegible]	2272	521	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	A	1988	[illegible]	[illegible]	53	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		540	[illegible]	[illegible]	[illegible]	[illegible]
		780	[illegible]	[illegible]	[illegible]	[illegible]
		530	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	A	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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		455	[illegible]	[illegible]	[illegible]	
[illegible]		400	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		50	[illegible]	[illegible]	[illegible]	[illegible]
	A	507	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		507	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible] percentage [illegible] as shown in Table V [illegible] 106 per cent. Hb. [illegible] 5,970,000 R.B.C. [illegible] concentration between [illegible] water [illegible] small [illegible] wastes.

TABLE V.—HAEMOCONCENTRATION [illegible]

Day	Subject A		Subject B		Subject C	
1	5,430,000	104 per cent	4,930,000	100 per cent	5,260,000	[illegible] per cent
[illegible]	5,170,000	100	4,[illegible],000	[illegible]	4,670,000	[illegible]
[illegible]	5,460,000	100	4,880,000	[illegible]	4,870,000	[illegible]
[illegible]	5,970,000	98	5,5[illegible],000	[illegible]	4,7[illegible],000	[illegible]
[illegible]	5,810,000	98	5,380,000	[illegible]	5,1[illegible],000	100
[illegible]	5,500,000	[illegible]	4,920,000	[illegible]	4,820,000	[illegible]

The blood sedimentation [illegible] differences [illegible] figures [illegible] after [illegible] period [illegible] attached to them [illegible] estimating the [illegible] concentration.

(b) Results [illegible] following [illegible] intelligence [illegible] experiment [illegible]

	Before	After
Subject A	88	[illegible]
Subject B	60	49
Subject C	3	[illegible]

In A and B [illegible] difference [illegible] results.

[illegible] responses [illegible] the [illegible] experiment.

[illegible] tests [illegible] interpreted [illegible] the [illegible] experiment [illegible]

[illegible] water [illegible]

[illegible] weight [illegible] subjects, [illegible] ordinary diet.

[illegible] the experiment was [illegible] personalities [illegible] started [illegible] tests [illegible] intelligent [illegible] personality [illegible]

Polydipsia [illegible] At the end of the above experiment, before the subjects were permitted to drink freely, they [illegible] water and were asked to state what [illegible] The answer [illegible] that the craving for water returned almost immediately. [illegible]

[illegible]

[illegible]

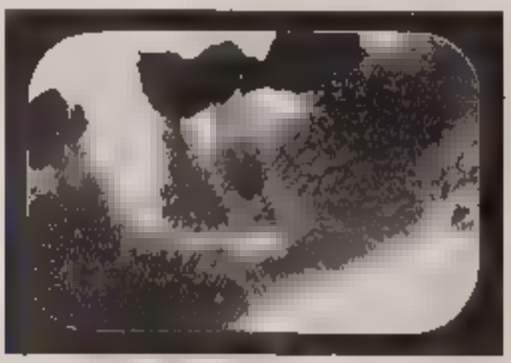
Clinical Notes and Cases

[illegible]

[illegible]

[illegible] RESPONSES

[illegible]



[illegible]

[illegible] PRECEDED BY [illegible]

[illegible]

[illegible]

[illegible]

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[illegible] ASUALTY [illegible] SEVERE [illegible] RONTAL [illegible] INJURY

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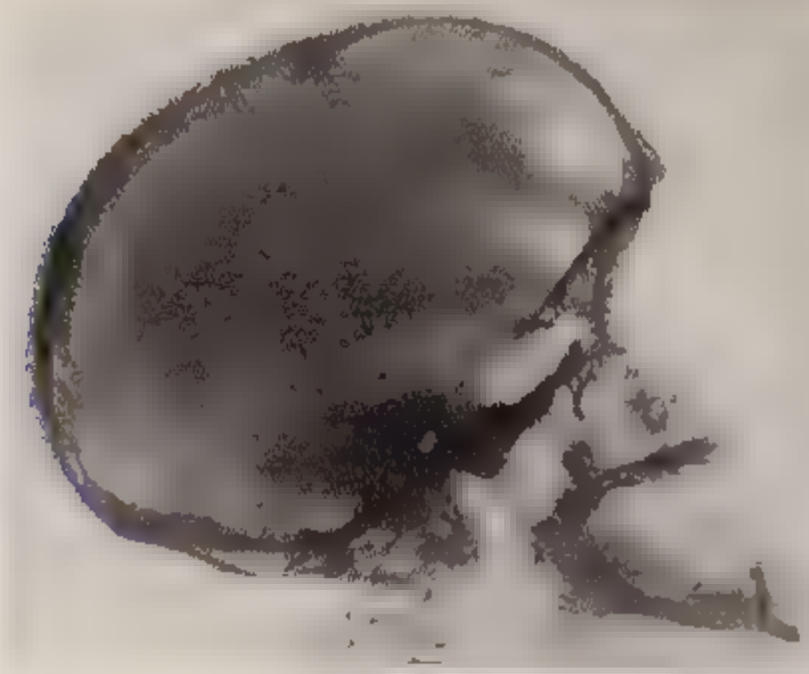

PULMONARY SIGNS IN MALARIA

[illegible]

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	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

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[illegible]

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News of the Service

OBITUARY

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HONOURS

[illegible]

[illegible]

[illegible] C.N.R.

[illegible]

[illegible]

Miss [illegible] Nursing Member.

Miss [illegible] Marsh, [illegible]

Mrs. M. [illegible] Nursing Member.

Miss M. [illegible] Tardew, [illegible] Nursing Member.

Miss [illegible]

RETIREMENTS, R.N.

[illegible]

PROMOTIONS, R.N.

[illegible]

[illegible]

ROYAL NAVAL VOLUNTEER RESERVE

[illegible]

QUEEN ALEXANDRA'S ROYAL NAVAL NURSING SERVICE

ROYAL COLLEGE OF SURGEONS OF ENGLAND

CHANGE OF ADDRESS

CAPTAIN A. HURFORD MEMORIAL FUND

Balance Sheet

[illegible]

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By subscriptions [illegible]	258 [illegible]	[illegible]	[illegible]
		[illegible]	[illegible]
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Signed [illegible]

President [illegible]

[illegible]

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Index

[illegible]

Abbreviations, [illegible] 9
Abstract [illegible] 22
[illegible] 43
[illegible] 97
Acknowledgments 8
Adjectives, [illegible] 143
Adverbs, [illegible] 70
Affixes [illegible] 203
[illegible] 110
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[illegible] 83
[illegible] 14
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[illegible] 1929 [illegible] 54
[illegible] 50
[illegible] 89
Morphemes [illegible] 46
Morphology [illegible] 1
[illegible] 110
[illegible] 189
[illegible] 258
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[illegible] 82
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[illegible] 110
Morphologies 84
[illegible] 8
[illegible] 3
Syntax [illegible] 191
[illegible] 177
[illegible] –78
[illegible] 171
[illegible] 247
[illegible] 198
[illegible] –
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